

1992-256

University of Alberta Library



0 1620 3450086 6



UNIVERSITY OF ALBERTA

OCT 17 1992

INTEGRATED OCCUPATIONAL PROGRAM

Program of Studies/Curriculum Guide

OCCUPATIONAL COMPONENT 36-LEVEL COURSES

1992

Curriculum

Occupational Component
36-Level Courses
Program of Studies/Curriculum Guide

1992

ALBERTA EDUCATION CATALOGUING IN PUBLICATION DATA

Alberta. Curriculum Branch.

Occupational component 36 level courses : program of studies/curriculum guide.

ISBN 0-7732-0481-4

1. Life skills -- Alberta. I. Title. II. Integrated Occupational Program.

HQ2039.A3.A333 1992

375.008

NOTE

CURRICULAR DOCUMENT FORMAT

To provide educators with a comprehensive overview of the Integrated Occupational Program, all IOP curricular documents have adopted the format of combining the Program of Studies and Curriculum Guide into one document. The shaded statements or segments within this document indicate the prescriptive contents of the Program of Studies. All other advice and direction provided is suggested only.

The terminology and format used in this document reflect policy in effect when IOP curriculum development began in 1987.

METRICATION POLICY

It is the policy of Alberta Education that "SI units become the principal system of measurement in the curriculum of the schools in the province." In preparing students for transition to the workplace where Imperial/U.S. measurements may still be in use, both SI metric and other units of measurement are addressed in the practical arts/occupational component of the Integrated Occupational Program.

The comparison/teaching of metric units with other units of measurement should be restricted to those that are relevant to student needs as reflected by common usage in course-related workplaces.

Copyright © 1992, the Crown in Right of Alberta, as represented by the Minister of Education. Alberta Education, 11160 Jasper Avenue, Edmonton, Alberta, T5K 0L2.

Permission is hereby given by copyright owner for any person to reproduce this program of studies/curriculum guide or any part thereof for educational purposes and on a non-profit basis.

ACKNOWLEDGEMENTS

Alberta Education acknowledges with appreciation the contributions of the following individuals and school jurisdictions to the development and validation of this document:

ASSOCIATE DIRECTOR: A. A. (Scotty) Day

INTEGRATED OCCUPATIONAL PROGRAM MANAGER: Michael Alpern

PROGRAM MANAGER, OCCUPATIONAL COMPONENT: Michael Alpern

INTEGRATED OCCUPATIONAL PROGRAM PROJECT TEAM

Gary Bertrand
Jeanne Cooper
Lorraine Crawford
Darlene Garnier
Selwyn Jacob
Jan Marvin
Paul McNair
Linda Snow

INTEGRATED OCCUPATIONAL PROGRAM REVIEW COMMITTEE

Stuart Adams	- County of Strathcona No. 20
Pat Boon-Anderson	- Lac La Biche School Division No. 51
Christopher Harrison	- Alberta Vocational College, Edmonton
Ed (Edwin) Holt	- Conference of Alberta School Superintendents
Wayne Nixon	- Alberta Career Development and Employment
William Smolak	- Alberta Teachers' Association
Carol Steen	- Lethbridge School District No. 51
Doug Tarney	- Wetaskiwin School District No. 264
Greg Thomas	- Alberta Education

EDITING: Lorraine Crawford
Elizabeth McCardle

COPY EDITING: Kim Blevins
Esther Yong

DESKTOP PUBLISHING: Lin Gray
Dianne Hohnstein

SECRETARIAL: Rita Flint

In addition, Alberta Education acknowledges with appreciation the contributions of educators and representatives of business, industry and labour in the development of this document.

TABLE OF CONTENTS

	PAGE
RATIONALE	1
PHILOSOPHY	3
GOALS OF THE IOP OCCUPATIONAL COMPONENT	4
MODEL FOR THE IOP OCCUPATIONAL COMPONENT	5
Concepts, Skills and Attitudes	6
Contexts for Instruction	6
Community Partnerships	6
Themes	6
Strategies in Learning and Teaching Generic Skills	7
INTERPERSONAL SKILLS AND THE SOCIAL SPHERE	10
REQUIRED AND ELECTIVE COMPONENTS	12
LEARNING RESOURCES FOR THE IOP OCCUPATIONAL COMPONENT	13
Student Resources	13
Teacher Resources	13
Other Learning Resources	15
Technology and the Media	15
PLANNING	17
Course Delivery	17
Course Credits	17
Course Content	17
Course Transfer	18
Curricular Integration	18
Community Partnerships	18
METHODOLOGY	19
Integrating Generic Skills and Work Skills	19
Instructional Strategies	19
Using the Problem-solving/Decision-making Model	20
Enhancing Student Participation in the Learning Process	21
Instructional Mediation	22
Questioning Techniques	23
EVALUATION	25
Strategies for Effective Evaluation	26
Evaluation in the Occupational Component	26
SCOPE AND SEQUENCE	27

	PAGE
PROGRAM OF STUDIES/PRESENTATION OF CONTENT	33
Introductory Skills	39
Organizational Skills	87
Communication Skills	109
Reading Skills	119
Writing Skills	125
Mathematical Skills	131
Visual Skills	141
Entrepreneurship	151
Field Experiences	157
Work Skills	161
OCCUPATIONAL COMPONENT COURSES: SCOPE AND SEQUENCE CHARTS	173
AGRIBUSINESS	
Agricultural Mechanics	175
Agricultural Production	181
Horticultural Services	187
BUSINESS AND OFFICE OPERATIONS	
Business Services	193
Office Services	201
CONSTRUCTION AND FABRICATION	
Building Services	209
Construction Services	219
CREATIVE ARTS	
Crafts and Arts	227
Technical Arts	233
NATURAL RESOURCES	
Natural Resource Services	239
PERSONAL AND PUBLIC SERVICES	
Child and Health Care Services	245
Esthetology	253
Fashion and Fabric Services	261
Hair Care	269
TOURISM AND HOSPITALITY	
Commercial Food Preparation	277
Food Services	283
Maintenance and Hospitality Services	289
TRANSPORTATION	
Automotive Services	299
Service Station Services	305
Warehouse Services	311

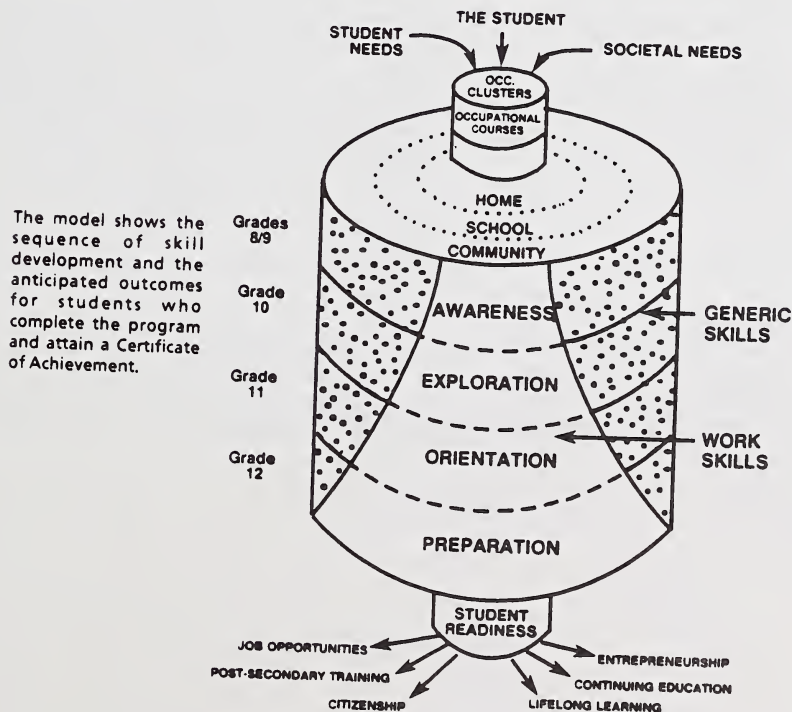
RATIONALE

The Integrated Occupational Program, developed as an outcome of the *Secondary Education in Alberta* policy statement, June 1985 is a program for students who have experienced difficulty in learning. The program consists of both core and complementary courses designed to develop the skills necessary for everyday living at home, in the community and on the job. While basic skill development in the academic courses is directed to improving students' skills in communication, computation and social relationships, the occupational courses also focus on the provision of opportunities for students to apply these skills.

Each of the occupational courses in the Integrated Occupational Program (IOP) is designed to enable students to develop essential concepts, skills and attitudes in the context of one or more occupational clusters.

In Grades 8 and 9, IOP students will have gained AWARENESS of the eight occupational clusters addressed in the occupational component of the program through their participation in an assortment of practical arts learning experiences.

At the 16-level, student EXPLORATION of potential career opportunities within the eight occupational clusters was encouraged. Level 26 students will have narrowed their career focus and will select an ORIENTATION in two or more related occupational areas. Level 36 enables students to narrow their career focus even further, and to develop skills in PREPARATION for their transition to either the world of work or to other educational/training institutions.



The occupational component of the Integrated Occupational Program consists of twenty courses arranged in eight occupational clusters. Each course represents an occupational area that will enable students who complete one or more Level 16–36 sequence of courses to select employment from families of occupations.

The eight occupational clusters and related occupational courses that comprise the occupational component of the Integrated Occupational Program are:

<u>Occupational Clusters</u>	<u>Occupational Courses</u>
1. Agribusiness	Agricultural Mechanics Agricultural Production Horticultural Services
2. Business and Office Operations	Business Services Office Services
3. Construction and Fabrication	Building Services Construction Services
4. Creative Arts	Crafts and Arts Technical Arts
5. Natural Resources	Natural Resource Services
6. Personal and Public Services	Child and Health Care Services Esthetology Fashion and Fabric Services Hair Care
7. Tourism and Hospitality	Commercial Food Preparation Food Services Maintenance and Hospitality Services
8. Transportation	Automotive Services Service Station Services Warehouse Services

The occupational clusters were identified from federal and provincial government data as being representative of Alberta's economy. The selection of the occupational courses resulted from consultation with educators and representatives from business and industry, and from a review of regional employment projections provided by Alberta Career Development and Employment.

A scope and sequence chart for each of the three years (Levels 16 through 36) for each occupational course and for both the generic skills component and the work skills component is provided in this document.

PHILOSOPHY

The Level 36 occupational component of the Integrated Occupational Program is designed to provide opportunities for the student to gather practical learning experiences within the context of the school, home, community and the workplace. The occupational courses focus first and foremost on the needs of students and seek to build on their strengths. They are designed to help students construct their own bridges as they make the transition from school to the workplace.

Throughout each of the occupational courses, teachers are encouraged to assess the needs of each student in a class and to complement and supplement the curriculum with additional materials that best meet individual needs.

Three key concepts about the occupational courses emerge from the above:

1. Students need to develop generic, transferable skills that will enable them to become responsible members of society.
2. Students need to develop work skills that will enable them to gain employment in one or more occupational cluster.
3. Students need to develop both generic skills and work skills through courses of study that integrate:
 - a. the learning of essential knowledge, skills and attitudes across the curriculum
 - b. the school and the community as partners in the educational process.

The integrated occupational courses are designed to enable each student to experience success through learning to develop a positive self-concept, to develop saleable life skills, and to make the transition from student, to worker, to contributing member of society.

GOALS OF THE IOP OCCUPATIONAL COMPONENT

The occupational component of the Integrated Occupational Program, Levels 16–36, strives to use the learning facilities of the school and the learning opportunities in the community to achieve the goals of assisting students to:

- ask questions and seek assistance, when necessary
- show initiative
- follow instruction
- accept constructive criticism
- enhance self-esteem
- think critically and creatively
- communicate effectively with peers and others
- develop improved social skills
- perform safe use and safe behaviour practices in the home, at school and in the workplace
- develop entry-level work skills
- understand the opportunities available to entrepreneurs
- encourage an interest and a desire to pursue further education and training.

At the 36-level, each occupational course incorporates the following additional goals:

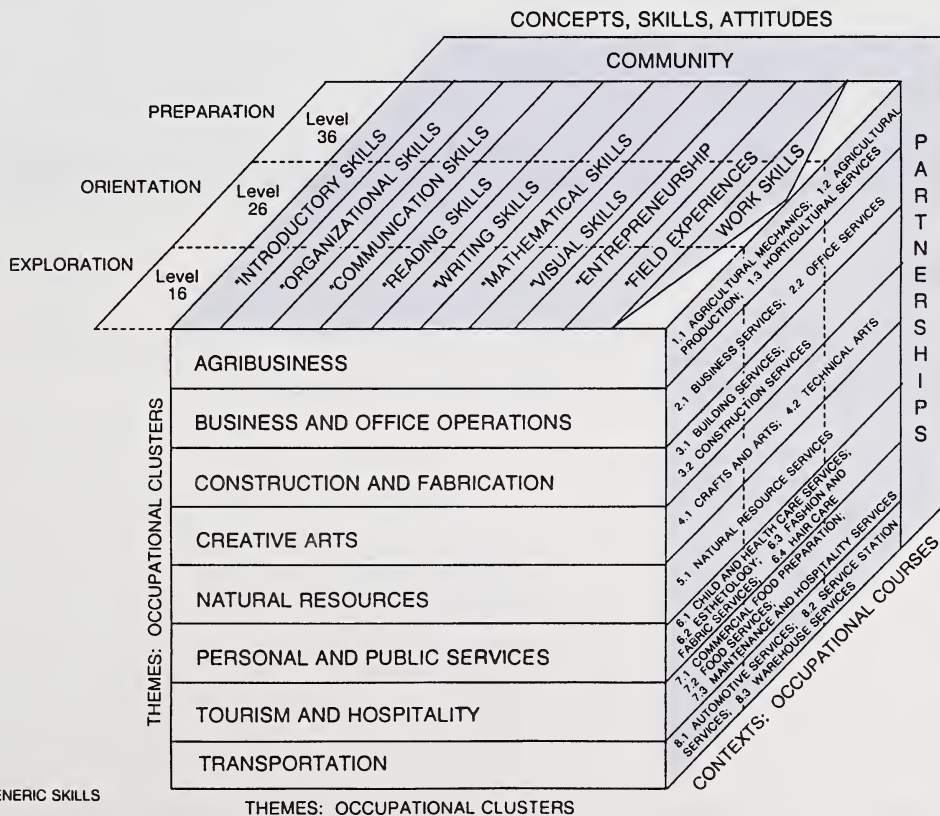
- to reinforce knowledge, skills and attitudes learned across the curriculum
- to prepare students for career opportunities from among clusters of occupations
- to develop organizational skills, including good work habits and appropriate time and task management.

MODEL FOR THE IOP OCCUPATIONAL COMPONENT

The IOP occupational model illustrates an integration of program dimensions using the holistic approach to instruction and learning. Four dimensions that provide a basis for program planning are represented in the cube:

- concepts, skills, attitudes
- contexts
- community partnerships
- themes.

INTEGRATED OCCUPATIONAL PROGRAM OCCUPATIONAL COMPONENT



CONCEPTS, SKILLS AND ATTITUDES

Although this dimension of the model represents the generic concepts, skills and attitudes that the program is intended to deliver, it must be remembered they are not, in themselves, the ends of the program. They are, rather, a type of "road map", providing guidance and direction in planning thematic instructional activities that will provide students with the knowledge and skills required for responsible participation in everyday life and the world of work. The first nine strands describe the generic component of the program. The tenth strand, Work Skills, describes a body of concepts, skills and attitudes that relate to, and are transferable among, two or more of the eight occupational clusters. The Work Skills strand contains two components:

- a generic component common to all occupational courses
- a component specific to each occupational course.

CONTEXTS FOR INSTRUCTION

The contexts for instruction provide relevance for student learning. In the occupational component of IOP, the contexts are twenty occupational courses that represent the scope of career opportunities available in the province of Alberta.

COMMUNITY PARTNERSHIPS

This dimension of the model indicates the relationships that are developed between the school and the community in order to provide students with applications of learning in real-life settings.

THEMES

Themes provide the setting in which discrete skills and strategies are linked together into meaningful activities. The twenty courses comprising the occupational component of the IOP are addressed through eight themes, each representing a cluster of occupations.

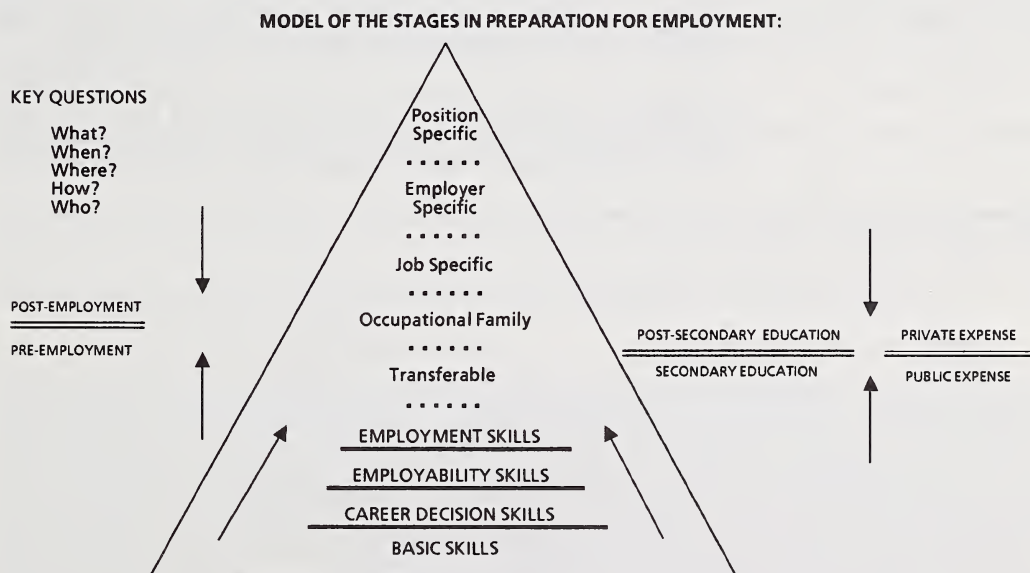
STRATEGIES IN LEARNING AND TEACHING GENERIC SKILLS

To facilitate a smooth transition from school to the workplace, students should be able to:

- identify employment opportunities and engage in the job search process
- relate well to others
- demonstrate safe and sanitary behaviours
- practise ethical behaviour, including time and task management
- communicate effectively with peers and others
- demonstrate basic literacy and computational ability (reading, writing, mathematics and visual skills)
- recognize the nature of entrepreneurship and the potential for entrepreneurial activities in our society.

Since these concepts, skills and attitudes are essential in any occupation, they are termed "generic". Students who demonstrate these abilities at the completion of the Integrated Occupational Program should be able to obtain employment in a broad range of occupations. To enhance employment opportunities, the occupational courses provide students with basic work skills that prepare them for entry to one or more clusters of occupations, as opposed to a specific job within a cluster. Commenting on the need for and purpose of generic skills, Dr. R. E. Taylor notes:

Proper treatment of generic skills in the educational process . . . contributes to efficiency in delivery . . . gives individuals flexibility and greater opportunity for job placement in related jobs . . . ; preserves options for individuals with respect to career choice and more specific training later.¹



1. Taylor, R. E. *Generic Skills and Vocational Education*. Paper presented in Edmonton, Alberta, February 1987.

Dr. Taylor defines the major components of his model as follows:

BASIC SKILLS: communication skills—oral and written, computation skills, higher order cognitive skills, such as reasoning and problem solving, interpersonal skills, learning skills

CAREER DECISION SKILLS: developing a sense of ownership and control through self-awareness, career awareness, knowledge of world of work trends and opportunities, career planning skills, career reassessment skills and career transition planning

EMPLOYABILITY SKILLS: knowledge of employment options, attitudes toward work, work habits, job seeking and retention skills

EMPLOYMENT SKILLS

- Transferable** – skills that are applicable in a variety of job situations; e.g., keyboarding, following instructions, planning, estimating, team work, group problem solving, quality control skills, scientific and computer literacy, work experience
- Occupational Family or Cluster** – skills common across a cluster; e.g., terminology, materials characteristics, materials handling, blueprint reading, measurements, knowledge of processes, record keeping, safety and hygiene
- Job Specific** – skills required to accomplish particular tasks such as to machine metal, lay brick, level a field, repair an internal combustion engine
- Employer Specific** – skills that are particular to an industry or firm; e.g., working for ABC machining metal for crankshafts for car, truck or tractor engines
- Position Specific** – skills related to a particular placement within a firm; e.g., working for M.I. Motors in Plant X machining metal crankshafts for small truck engines using a Cincinnati Millicron Automated Turning Centre Model with tolerances of 0.01: Under Supervisor Z with co-workers A, B, C, D.

The components of Dr. Taylor's model have been adapted for use in the occupational component of IOP as indicated in the following chart.

IOP Occupational Model	Model of the Stages in Preparation for Employment
Generic Skills	● Basic skills ● Career decision skills ● Employability skills ● Transferable employment skills
Work Skills	Employment skills related to: ● an occupational cluster ● a specific job ● a specific employer ● a specific position

STRATEGIES AND PROBLEMS IN LEARNING AND TEACHING GENERIC SKILLS

There are two main strategies used to deliver generic skills: one is to teach them as a content area and as a precursor to more specific occupational orientations and applications; the other is to infuse them into specific occupational training, and to teach their applications as a part of specific occupational preparation.

The chief drawback to the first approach is that skills taught without applications can appear meaningless to students. Limited application of the generic skills to a range of situations in various occupational areas also tends to limit the general approach.

The second approach of integrating generic skills in occupational content has the benefit of higher student interest and motivation and an enhanced experiential background. It also provides specific contexts within which the generalized learnings may be applied.

Teachers should encourage students to indicate applications of generic skills to other occupations and contexts. This strategy will develop the students' ability to transfer acquired concepts, skills and attitudes to other settings and situations.

We must capacitate students as active partners for their own learning by giving them opportunities and responsibilities for establishing and recognizing learning goals, and opportunities for seeking out and achieving them both within the school curricular structure and within the home and community.¹

Cooperative planning for instruction with other teachers in the school (teachers of core subjects, CALM and other complementary courses) will contribute to the list of work skills and to ways of reinforce both the generic and work skills by expanding their range of application. Similarly, teachers of occupational courses should take every opportunity to reinforce core curricula skills in each occupational course.

Students and potential employers need documentation of skills mastered and the variety of contexts (occupational courses) in which these skills have been applied.

As teachers, students, parents and the community become more aware and involved in the development of the generic skills, work skills and other outcomes designed to meet the goals of the Integrated Occupational Program, a partnership is formed. This partnership acknowledges and reinforces the generic skills, the learning process and the outcomes of the learning process.

The scope and sequence of generic skills related to the occupational component of the Integrated Occupational Program are outlined on pages 27-32.

1. Taylor, R. E. *Generic Skills and Vocational Education*. Paper presented in Edmonton, Alberta, February 1987.

INTERPERSONAL SKILLS AND THE SOCIAL SPHERE

High school students are in a transitional stage of life. Adolescence, which is characterized by rapid growth and the onset of puberty, is often a time of uncertainty and excessive concern about peer relationships. Responses in early adolescence may appear to be stressful, as students are developing the ability to reflect upon and analyze their emotions. Students at this age are practising to be adults.

The instructional program does affect interpersonal learning; however, schools are not the sole influences on the student's emotional, social and moral development.

The Goals of Secondary Education directly state the importance of affective, interpersonal and moral goals when they indicate that students should:

- learn about themselves and develop positive, realistic self-images
- develop constructive relationships with others based on respect, trust, cooperation, consideration and caring as one aspect of moral and ethical behaviour.

Students will vary in their emotional/social development and their ability to cope with personal problems. Behaviours viewed as "problematic" are often simply an indication of the adolescent's lack of sophistication in using adult skills. Classroom instruction must provide a variety of approaches that will encourage students to reflect upon their responses in social situations and to develop productive interpersonal skills. The guidelines that follow have been adapted from Alberta Education's monograph *Students' Interaction Developmental Framework: The Social Sphere* (1988), and are intended to foster affective, interpersonal and moral learning within the classroom.

- Model appropriate behaviour for students. When teachers are polite and respectful of students' dignity, students will respond positively. Students imitate and thereby implicitly learn to deal with emotions, other people and moral issues by observing the consistency of adult behaviour.
- Encourage students to express their opinions and feelings, to ask questions and to accept emotions as they occur in day-to-day life. Through mediated learning, encourage students to examine emotional responses from different frames of reference, and to organize and interpret their own responses as well as the responses of others.
- Provide students with supportive comments, guidance and genuine expressions of concern. Set expectations that are firm and fair, and then believe in the students' ability to meet these expectations and do well. Develop "working agreements" to help tasks flow smoothly, and to ensure that students understand the nature of the instructional tasks they are asked to perform.
- Ensure that classroom management practices and rules are known, upheld, moderate in nature, negotiable and consistently applied. Responding to the harmful or unjust effects/consequences of a moral transgression is more effective than reference to broken rules or unfulfilled social conventions.

- Recognize that experiential learning is a particularly effective vehicle for teaching interpersonal skills. Although some learning may occur through listening and reading, one best learns to live with other people by living with other people. Cooperative learning techniques are especially useful where students are actively involved in lessons linked to their own needs, interests or experiences.
- Be aware that although adolescents deal with a number of issues, they usually cope by managing one problem/issue in their lives at a time. Help students to integrate various aspects of their lives by encouraging them to recognize how various problems/issues/solutions are often interrelated.
- Assist students to learn skills that are more appropriate in differing contexts. Although some students are described as "lacking in social skills", socially maladapted students do not necessarily lack either skills or social involvement; rather, they use inappropriate skills in particular contexts. When directly teaching interpersonal skills, be as concrete as possible, and "build bridges" by linking situations with appropriate actions and behaviours.
- Assist students to focus on the need for a system of shared conventions. As students affirm the social system of conventions, they will view conventions more positively and will become less disruptive in their behaviour.
- Encourage students to interpret and evaluate the competing moral issues presented to them. Provide opportunities for open discussion and debate, where students interact with their peers. Discuss issues that are "real" to the student.
- Provide students with practical strategies for resolving interpersonal conflict. A framework for social problem solving is provided in the teacher resource manual. This framework uses a problem-solving approach in helping students to identify:
 - reasons for the difficulty
 - strategies to avoid the conflict another time.

Student development in the affective, interpersonal and moral domains has been addressed in this curriculum through attitudinal learning objectives that accompany each cluster of concepts and skills in the program of studies/curriculum guide. Instruction must include a balance of approaches appropriate to student development in each domain, as delivery of isolated content will not ensure the formation of desired attitudes. The *IOP Occupational Component, 36-Level Courses, Teacher Resource Manual* provides additional strategies that facilitate attitudinal development within the context of themes suggested in the program.

REQUIRED AND ELECTIVE COMPONENTS

The learning objectives identified in this program of studies/curriculum guide are generic to all of the 36-level occupational courses within the Integrated Occupational Program. Learning objectives specific to the development of work skills within an occupational course are identified in the *IOP Occupational Component, 36-Level Courses, Teacher Resource Manual*. (Henceforth referred to as *Teacher Resource Manual*.)

Both the generic and the work skills learning objectives are designed to accommodate individual student differences through the identification in each occupational course of:

- elective components that may be used as enrichment activities
- optional learning activities that provide the teachers and students with the flexibility to select and adapt course content to meet local needs, interests and resources.

In addition, the teacher is expected to make an assessment of each student's abilities upon entering an occupational course (see *Teacher Resource Manual*, "Assessing Students' Abilities") and to develop a teaching plan that provides each student with sufficient time to acquire competencies and to experience success at each step of the course.

In this context, teachers are advised to individualize their expectations of student performance, and to provide remedial or enrichment activities to individual students as indicated by assessing their ongoing performance. The elective component of each occupational course permits teachers to:

- remediate or reinforce skills from the required component that appear to be weak
- extend or expand upon topics, thus embedding additional concepts, skills and attitudes considered appropriate to student interest and need
- enrich the program by introducing new concepts and activities considered relevant to the student and the local community.

The instructional time for each occupational course should be apportioned:

- 70% Required
- 30% Elective

LEARNING RESOURCES FOR THE IOP OCCUPATIONAL COMPONENT

STUDENT LEARNING RESOURCES

BASIC LEARNING RESOURCES

The resource listed below meets the majority of the goals and objectives identified in this program of studies/curriculum guide:

Campbell, Richard, Mary J. Thompson and Marilyn W. Dyck. *Working: Today and Tomorrow*. Canadian edition. Toronto, ON: Irwin Publishing, 1990.

Working: Today and Tomorrow provides for the focused development of the generic concepts, skills and attitudes identified in the 36-level program of studies. It is intended that appropriate sections of the text be used throughout the sequence of each occupational course, Levels 16 through 36. These sections are identified in the *Teacher Resource Manual*.

SUPPORT LEARNING RESOURCES

A student workbook is available for each 36-level occupational course. The workbook provides students with job sheets that relate to the scope and sequence of skill development identified in the Work Skills Profile contained in each student workbook.

The specific activities contained in the workbooks are not meant to be prescriptive or exhaustive; rather, they may provide points on which to focus the development of specific learnings related to an occupational cluster.

Teachers are encouraged to complement and supplement the material contained in student workbooks to meet individual student's needs.

TEACHING RESOURCES

The teaching resource listed below is designed to support the instructional use of the basic learning resource:

The *IOP Occupational Component, 36-Level Courses, Teacher Resource Manual*, 1992 developed by Alberta Education contains strategies and suggested student activities intended to structure and support:

- development of the concepts, skills and attitudes as outlined in the program of studies
- development of life and work skills
- delivery of instruction in each occupational course.

The teacher resource manual contains the following information:

1. Generic Skills Evaluation Chart

As indicated in the Occupational Model, the curriculum for each occupational course consists of ten major strands (concepts, skills and attitudes). Nine of these strands (1–9) are categorized as "Generic Skills" (concepts, skills and attitudes). The tenth strand, Work Skills, consists of both a generic component and a component that is specific to each occupational course.

Generic concepts and their related skills focus on the development of students':

- knowledge about the world of work
- knowledge about job opportunities and career ladders
- awareness of and the ability to demonstrate safe use and sanitary practices in the workplace
- attitudes and ethics appropriate to good citizenship, good workmanship and lifelong learning.

In addition, the generic concepts and their related skills REVIEW, REINFORCE and APPLY concepts, skills and attitudes learned in the core curricular areas. These integrated generic concepts permit further skill development in the areas of:

- communication
- reading
- writing
- computing
- viewing.

THE GENERIC CONCEPTS AND THEIR RELATED SKILLS AND ATTITUDES SHOULD, WHENEVER POSSIBLE, BE TAUGHT IN THE CONTEXT OF THE OCCUPATIONAL CLUSTER AND IN CONJUNCTION WITH THE WORK SKILLS SPECIFIC TO THE OCCUPATIONAL COURSE.

2. Instructional Guides

Each concept and its related skills and attitudes is addressed in the *Teacher Resource Manual*. Key ideas, resource indicators and suggested student activities are included. The contents of the instructional guides are not meant to be prescriptive or exhaustive. Rather, they are presented to stimulate and to guide teachers in their integrated unit and lesson planning.

3. Selected Resources

In support of the instructional guide component of the *Teacher Resource Manual*, a list of additional resource materials is provided. In some cases, copies of selected reference materials are included.

4. Teacher Support Material

Teacher support material related to each occupational course includes:

- course sequence, credit and certificate requirements
- course objectives and overviews
- suggested locations, facilities and other learning resources.

OTHER LEARNING RESOURCES

Other learning resources are identified for each occupational course in the *Teacher Resource Manual*.

The titles of the other learning resources identified in the *Teacher Resource Manual* were provided through the courtesy of the agencies and institutions indicated. This listing is not to be construed as an explicit or implicit departmental approval for use. These titles are provided as a service only to assist local jurisdictions to identify resources that contain potentially useful ideas for teachers. The responsibility to evaluate these resources prior to selection rests with the local jurisdiction according to local policy.

TECHNOLOGY AND THE MEDIA

Students will be expected to use a variety of technologies in the occupational courses. In addition to these course specific technologies, students should be encouraged to recognize and to use computers as important tools of the Information Age.

REGIONAL AND URBAN RESOURCE CENTRES

Films and videos are available for loan through the regional and urban resource centres listed below. In some instances, computer software is also loaned. Catalogues of holdings are available upon request.

REGIONAL RESOURCE CENTRES

Zone 1

Zone 1 Regional Resource Centre
10020 – 101 Street
P.O. Box 6536
Peace River, Alberta
T8S 1S3
Telephone: (403) 624-3187

Zones 2/3

Central Alberta Media Services (CAMS)
2017 Brentwood Boulevard
Sherwood Park, Alberta
T8A 0X2
Telephone: (403) 464-5540
467-8896

Zone 4

Alberta Central Regional Education Services
(ACRES)
County of Lacombe
Parkland Regional Library Building
56 Avenue and 53 Street Corner
Box 3220
Lacombe, Alberta
T0C 1S0
Telephone: (403) 782-5730

Zone 5

South Central Alberta Resource Centre (SCARC)
County of Wheatland
Westmount School
Wheatland Trail
Box 90
Strathmore, Alberta
T0J 3H0
Telephone: (403) 934-5028

Zone 6

Southern Alberta Learning Resource Centre (SALRC)
Provincial Government Administration Building
Room 120, 909 Third Avenue North
P.O. Box 845
Lethbridge, Alberta
T1J 3Z8
Telephone: (403) 320-7807

URBAN RESOURCE CENTRES

Learning Resource Service
County of Strathcona
2001 Sherwood Drive
Sherwood Park, Alberta
T8A 3W7
Telephone: (403) 464-8235

Red Deer Public School Board
4747 - 53 Street
Red Deer, Alberta
T4N 2E6
Telephone: (403) 343-1405

Instructional Materials
Calgary Separate School Board
6220 Lakeview Drive SW
Calgary, Alberta
T3E 6T1
Telephone: (403) 246-6663

Education Media
Calgary Board of Education
3610 Ninth Street SE
Calgary, Alberta
T2G 3C5
Telephone: (403) 294-8540

Edmonton Public School Board
Centre for Education
Edmonton, Alberta
T5H 4G9
Telephone: (403) 429-8320

IMC Manager
Medicine Hat School District
601 First Avenue SW
Medicine Hat, Alberta
T1A 4Y7
Telephone: (403) 526-1323

Curricular Resources
St. Anthony's Teacher Centre
10425 - 84 Avenue
Edmonton, Alberta
T6E 2H3
Telephone: (403) 439-7356

Lakeland Public School District No. 5460
Postal Bag 1001
Bonnyville, Alberta
T9N 2J7
Telephone: (403) 826-3145
Fax: (403) 826-4600

ACCESS NETWORK

ACCESS offers a variety of resources and services to teachers. For a nominal dubbing and tape fee, teachers may have ACCESS audio and video library tapes copied. ACCESS also offers a service called "Night Owl Dubbing". This allows educators to tape late night educational programs directly from their own televisions.

ACCESS publishes both an *Audio-Visual Catalogue* and a comprehensive schedule of programming, available on request.

For additional information, contact ACCESS Network, Media Resource Centre, 295 Midpark Way SE, Calgary, Alberta, T2X 2A8 (from outside of Calgary, telephone toll free, 1-800-352-8293; in Calgary, telephone 256-1100).

PLANNING

COURSE DELIVERY

Since the IOP courses will be offered in a number of very different communities and schools, a flexible approach to course delivery is necessary. Some jurisdictions may choose to offer courses in one occupational cluster, others in four or five clusters. Occupational course offerings in individual schools should be selected to accommodate the:

- needs and interests of students
- availability of school facilities
- availability of community resources
- availability of teachers with skills related to occupational areas.

COURSE CREDITS

Students taking a complete program of studies from within the Integrated Occupational Program will have the opportunity to select from among the occupational courses available in each high school.

Each 36-level occupational course is offered for 10 credits. In total, a student is required to take a minimum of 40 credits in occupational courses including one 36-level occupational course, 27 credits in specified academic courses and a minimum of 13 unspecified credits throughout the senior high program in order to qualify for a Certificate of Achievement. Some or all of these unspecified credits may be obtained through completion of unspecified occupational courses.

COURSE CONTENT

The detailed work skills identified in each scope and sequence chart (pp. 175–316) provide the suggested occupation-related content for each 36-level occupational course. These work skills are also the suggested contexts through which the generic skills are developed. Suggestions for flexibility in the selection and inclusion of instructional content are provided in the teacher support material found in the *Teacher Resource Manual*.

Before planning for instruction, the teacher is advised to examine the teacher support material related to the 36-level occupational course to be taught.

Elective and enrichment activities are indicated both in this document and in the *Teacher Resource Manual*. However, teachers are encouraged to supplement and complement the work skills component of each occupational course with additional projects and activities that meet the needs of students and provide additional preparation for occupational opportunities in the local community.

COURSE TRANSFER

A student who demonstrates a high level of interest and ability in 36-level occupational courses may be recommended for transfer to an appropriate course in other Career and Technology Studies subject areas.

The teacher is advised to consult with others including the student, parents, school counsellor and administrator, to determine whether transfer to a higher level course would be in the student's best interest.

CURRICULAR INTEGRATION

The design of the core and the occupational courses within the Integrated Occupational Program is developed on the premise that the concepts, skills and attitudes required by students in order to make the transition from school to the workplace can be taught through strategies that provide for REVIEW, REINFORCEMENT and APPLICATION of learnings in real-life contexts and situations.

Each occupational course provides a real-life context for the review, reinforcement and application of concepts and skills learned in other courses, both core and complementary.

Teachers have traditionally tended to integrate concepts, skills and attitudes from other subject areas into their teaching specialty; however, this tendency has generally been incidental rather than by curricular and instructional design. In contrast, the Integrated Occupational Program is designed to integrate related concepts, skills and attitudes across the curriculum. In addition, teachers in the program are encouraged to adopt integrated planning and teaching strategies.

COMMUNITY PARTNERSHIPS

A major feature of each occupational course is the inclusion of activities and strategies that may be used to enhance student learning through school–community partnerships. Community partnerships include both in-school visits, demonstrations, talks, etc., given by community members, and teacher/student observations, job-shadowing, work study and work experience activities within the community. In each occupational course at the 36-level, teachers are encouraged to develop their instructional plan to include a minimum 40% time allocation to community partnership activities.

METHODOLOGY

Emphasis has been placed on relating much of the content of each 36-level occupational course to the concepts, skills and attitudes learned across the curriculum. The transferable and related content of each occupational course is described as "generic skills".

In addition to the body of generic skills, each 36-level occupational course is identified by a scope and sequence chart of related work skills (see pp. 175–316). It is through the development of these work skills that students learn the generic skills in an applied and meaningful context; that is, an occupational course.

The design of the core and the occupational subject areas within the Integrated Occupational Program is developed on the premise that the concepts, skills and attitudes required by students in order to make the transition from school to the workplace can be taught through strategies that provide for APPLICATION, REINFORCEMENT and REVIEW of learnings in real-life contexts and situations.

The IOP occupational courses provide a real-life context for the review, reinforcement and application of concepts and skills learned in other courses, both core and complementary.

INTEGRATING GENERIC SKILLS AND WORK SKILLS

Both generic skills and work skills are transferable. The generic skills and some of the work skills are transferable across the curricula; additional work skills are transferable across a cluster of occupations and, in some instances, among clusters of occupations. For example, learning the correct use of hand, power, layout and measuring tools, provides students with concepts, skills and attitudes that are applicable in almost every occupational cluster and in other home and community situations.

Teachers are encouraged to make students aware of the transferability of both the generic skills and many of the work skills. Suggested strategies for skills integration are provided in the *Teacher Resource Manual*.

INSTRUCTIONAL STRATEGIES

In recent years, a greater awareness of individual differences in learning styles, rates of learning, and the needs of individual students has fostered changes in attitudes, teaching methods and curriculum materials. These changes are designed to meet the needs of students. The changes do not mean that the quality of a course is lessened; they do, however, mean that occupational-related courses are being redesigned to increase the opportunity for each student to learn and develop a body of concepts, skills and attitudes that will enhance employability, develop citizenship skills and promote lifelong learning.

Instructional strategies that might assist the teacher of an occupational course to achieve these goals include:

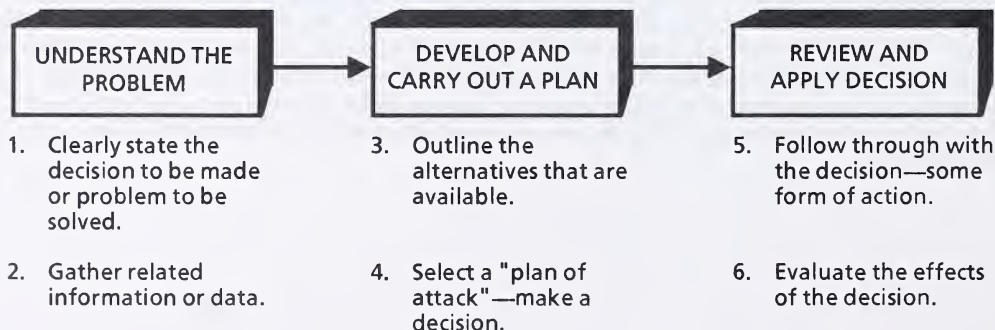
- Modify the sequence and, if necessary, the scope of the curriculum to reflect the ability of the students.
- Use elective components to provide enrichment activities.
- Integrate one or more generic skills, as appropriate, while teaching each work skill.
- Increase the meaningfulness of the curriculum by adapting it to meet local industry and job opportunities.
- Use community partnerships to create real-life learning experiences.
- Use varied instructional strategies; e.g., individualized instruction, small-group instruction, job shadowing, mentorship.
- Involve students in creating their learning environment; e.g., have students "personalize" their work area, decide on seating arrangements.
- Minimize lectures.
- Maximize hands-on activities.
- Use visual aids to teach, review and reinforce information.
- Encourage students to take some responsibility for their own and peers' behaviour, attendance, performance; e.g., foster an environment of helping, sharing and caring.
- Use incremental teaching/learning techniques.

USING THE PROBLEM-SOLVING/DECISION-MAKING MODEL

The problem-solving and decision-making model used throughout the Occupational Component 36-Level Courses curriculum does not form an independent theme or unit of study. However, it is essential that the teacher introduce the model at the beginning of the course. It will then form the basis for problem solving, decision making and thinking throughout the entire program.

Critical to the development of decision-making skills is the attitude with which students approach the task. A positive, open-minded approach is needed for thinking skills to develop. Attitudes are not taught, however. Their development can only be nurtured through an atmosphere that fosters flexibility and acceptance. Students must be encouraged to take risks in the development of particular decision-making strategies. Student understanding of problem situations and the decision-making process should be made a priority through consideration of the context within which discussion and activity will take place. Problem situations should be selected from those that are within the range of student experience, interest and need.

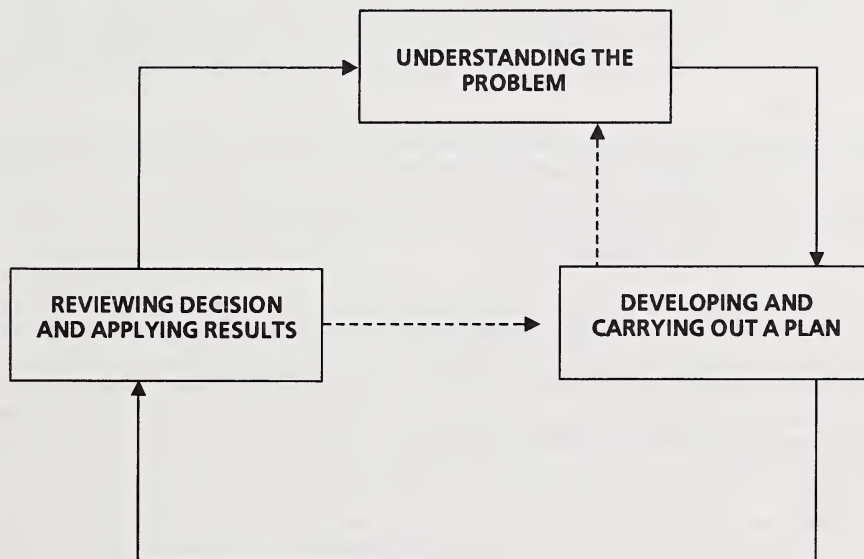
The six steps of the decision-making model correlate with the input, process and output phases of cognitive functions.



The student must become an active participant in this process. Conscious application of this model results in metacognition or "thinking about thinking". Metacognition thus becomes a second major goal of this process, continuous application of which erodes mental sets and allows the student to function in a more flexible, adaptive manner.

Flexibility and adaptability of attitudes, problem-solving and decision-making strategies are the key to productive functioning in a dynamic, ever-changing society.

The decision-making model outlined should not be interpreted as a model consisting of fixed and rigid stages and strategies. Its use will depend on individual problems and individual students. Students may not always use each stage of the decision-making process, and will select only those strategies that are appropriate to the problem. Students should recognize decision making, however, as a series of interrelated actions that lead to a solution.



ENHANCING STUDENT PARTICIPATION IN THE LEARNING PROCESS

The occupational courses attempt to have students become active participants in their community and society. They also attempt to have the student become an active participant in the decision-making and learning processes.

Student performance in decision making can be enhanced by making students conscious of their thought processes; i.e., metacognitive awareness. They need to be aware of and discuss how they think in order to become more strategic in their learning repertoires, and to monitor their decision-making efforts. The teacher can foster this by thinking out loud as he or she solves problems, by asking questions and by having students identify the strategies and processes used when making decisions. Consistent modelling by the teacher of a mind set to the stages and strategies outlined will provide a structure within which student decision-making skills can develop.

Modelling, as opposed to demonstrating, involves "talking through" a complete process in order to expose thinking processes to the student. While in a demonstration everything turns out as it should, modelling should include false starts, trouble spots and having to deal with errors. Modelling requires teachers to express their thinking processes out loud so that students can see not only how the process is done, but also how difficulties and ambiguities are addressed.

While teachers often model when explaining processes and problems, knowledge and awareness of the value of modelling can serve to sharpen this process. Asking students where to begin in a problem situation makes a good starting point. If the reply is "I don't know!", an area of difficulty is determined. The "mini-process" of determining a starting point might then be modelled.

INSTRUCTIONAL MEDIATION

Instructional mediation is one method of enhancing students' active participation in the learning process (Feuerstein, 1979)¹. Mediation refers to the teacher transmitting to the student what is considered important by the community and society. It also refers to the teacher's interpretation of the physical and social context for the student. To be "mediative", the act must meet at least three criteria:

- the mediation must be **MEANINGFUL**. Teachers should constantly refer to "real-life" examples of how the content relates to reality, both in and out of school
- it must be the teacher's **INTENTION** to have the student learn something specific. The teacher should ensure the student understands specifically what has to be learned
- the mediation must have a **TRANSCENDENT** goal.

Instructional mediation regulates the students' behaviour in terms of the use of strategies and heuristics on tasks. Emphasis on a strategic view of tasks will encourage students to become independent in the tasks they perform and the processes they use. For example, a strategy for attacking a specific task problem will enable more students to solve similar problems on their own. In addition, such a strategy enables students to identify for the teacher at what point they need assistance, if they are unable to solve the problem completely.

A further use of mediation is in developing the students' feeling of competency. Students need to see themselves as competent and able to do things. Students who feel competent, and who recognize their effort as being effective in learning, are more likely to be persistent in attempting new tasks that are difficult. On the other hand, students who require frequent praise for their effort come to have limited performance goals and are hesitant to engage in any task at which they cannot quickly become successful. Teachers can encourage students to extend their learning goals by focusing mediation on the role of effort and strategy in achieving success, rather than in praising performance.

In creating a classroom environment that will stimulate strategic behaviour and thinking skills, the teacher should:

- identify, but not correct errors
- encourage students to correct their own errors
- pause and clarify, but not interrupt
- demand constant vocalization of student thought processes that are used, and model these for students
- encourage persistence.

1. Feuerstein, Reuven. *The Dynamic Assessment of Retarded Performers: The Learning Potential Assessment Device, Theory. Instruments and Techniques*, Baltimore, Maryland: University Park Press, 1979, p. 71.

The mediation process can also be enhanced through the use of appropriate "questioning techniques" and the "modelling" of complete processes and thought patterns. These instructional methods are described in the paragraphs that follow.

QUESTIONING TECHNIQUES

Questioning techniques should include the use of chains of questions that lead students to discover their own answers. Question chains should begin with focus questions such as:

- What is the goal of this problem?
- What do we want to do?
- What are we looking for?
- What is stopping us?
- Who can we ask?
- Where can we look?
- What should we do first?
- What is this process called?

Once students have established the significant pieces of information necessary to perform the task or to solve the problem, the focus is expanded through questions like:

- What can we do?
- Have we got enough ideas yet?
- What is our next step?
- How will we do that?
- What is the relationship between ... and ...?
- How are ... and ... related?
- How can we simplify ...?

When students have succeeded with the task or problem, questions should be asked that encourage students to review the process used and evaluate their work. Such questions may include:

- Have we finished?
- How can we decide if ... is a reasonable solution?
- How can we check this solution?
- Is there a better solution?
- How do you know that we have solved the problem?
- What are different ways we can approach the problem?
- How could we make our work easier another time?
- When might you use this process again?
- What should we tell others?

Questions that probe and prompt students to process information, rather than fixate at the simple recall level, will make students aware that they are expected to be actively involved in thinking processes. When students experience success with problems through use of the teacher's questioning chain, they will discover the importance of the thought processes used, and be encouraged to develop personal strategies that direct their efforts in related tasks.

The PMI strategy (de Bono, 1986)¹ also helps students systematically explore a subject in depth. This strategy focuses students attention on the "Plus" (P) aspects, then the "Minus" (M) aspects, and finally, the "Interesting" (I) aspects of a concern or issue. This strategy also allows the student to view how others think. The following four-step procedure can be used.

1. Assign a topic or task based upon student interest or course content.
2. Divide the class into groups of three or four students and have them divide a sheet of paper into three columns labelled (P), (M) and (I).
3. Ask students to think about the "Plus", "Minus" and "Interesting" points of the discussion topic or task and write them in the appropriate column.

Note: All points are to be accepted without judgment or bias.

4. Share the points raised with the rest of the class and discuss.

A practical extension to this strategy might be to have each group of students produce a project based on the outcome of their PMI strategy. Each group of students will then have the opportunity to evaluate their decision-making and project production skills in relation to the other groups.

1. de Bono, Edward. "The Practical Teaching of Thinking Using the CoRT Method." *Special Services in the Schools*. Volume 3, Numbers 1/2, Fall/Winter, 1986 (p. 39).

EVALUATION

Evaluation involves the collection, processing and use of information to formulate judgments about student progress, ability and performance. Teachers of Integrated Occupational Program courses will therefore need to undertake both formative and summative evaluation. Because of the nature of the courses and the nature of the students, ongoing or formative evaluation should be emphasized. Formative evaluation provides information during the process of learning to determine the progress of individual students, and their strengths and weaknesses in the acquisition of necessary knowledge, skills and attitudes. Summative evaluation should also occur at the end of each major segment of a course to assist in making judgments about the overall level of achievement in the course, final grades and future course placement.

In occupational courses, summative evaluation may refer to the entry-level mastery of a specific practical skill or combination of skills. The evaluation of skill mastery tends, however, to be very subjective. Teachers are encouraged to seek assistance from colleagues and community partners when evaluating mastery of practical skills.

Major functions served by the process of evaluation include provision of:

- feedback to the student relative to his or her success in the learning process. Students have difficulty in monitoring and regulating their learning behaviours and require a great deal of external feedback as to their progress. Feedback and encouragement must be provided on a regular basis
- information to the teacher concerning the appropriateness of learning goals and objectives, and the effectiveness of learning strategies and materials that have been used. Such information enables the teacher to modify the program as required with respect to pacing, learning resources, teaching methods or objectives
- information to the parent regarding the student's progress. Where appropriate, reports to parents/guardians should be interpreted through an interview so that the implications of the evaluation are understood. While useful in communicating student progress to parents/guardians, the interview is also valuable in identifying individual needs that may be met through program planning and delivery.

Evaluation should serve diagnostic purposes in identifying student strengths and weaknesses, as well as summative needs in measuring overall growth. Because evaluation is an integral part of all aspects of the instructional process, information used in the evaluation of a student should be gathered from a variety of sources using a variety of methods. The evaluation program in each occupational course must consist of more than paper-and-pencil tests. While such tests may be an effective way of evaluating the learning outcomes of specific work skills and applications, an effective system of evaluation should include, to some degree, the use of all of the following sources of information:

- observation of attitudes and performance
- oral and written presentations of solutions to problems/life and work skill applications
- personal interviews with students
- attitude scales
- project work; e.g., job sheets
- feedback from parents
- teacher rating scales/checklists/inventories
- self-rating/self-marking
- peer marking
- records of previous achievement
- quizzes related to specific objectives
- diagnostic tests.

STRATEGIES FOR EFFECTIVE EVALUATION

Evaluation was, in the past, the process by which many students within the program were identified as "failures". Many students will go to extreme measures to avoid being "tested" again. Absence from examinations; feigning an "I don't care anyway" attitude; or not giving their best effort so that the anticipated failure can be combatted with "I didn't try my best", are all common behaviours. Although evaluation is a fact of daily life and necessary to the program, efforts must be made to provide variation in the procedures used so as to draw upon students' strengths and provide for their success in the evaluation process.

EVALUATION IN THE OCCUPATIONAL COMPONENT

A variety of methods of evaluating student progress should be used in occupational courses. When choosing an evaluation procedure, the teacher should consider the appropriateness of the procedure to the knowledge, skill or attitude being evaluated.

An objective of the Integrated Occupational Program occupational courses is to provide a learning situation whereby students may improve their self-concept. With this in mind, the following evaluation strategies are suggested:

- identify smallest units of behaviour in each skill
- evaluate and reinforce progress incrementally
- evaluate and reinforce positive behaviour regularly
- use a combination of evaluation techniques including checklists, observations, project work, written and oral presentations (sample evaluation instruments are included in the *Teacher Resource Manual*)
- use self- and peer-evaluation techniques
- provide immediate feedback whenever possible
- permit students easy access to records of achievements
- use community partners to assist in student evaluation; e.g., through customer service activities
- display students' work where possible to enhance students' self-esteem and motivation.

SCOPE AND SEQUENCE

The scope and sequence chart provided on the following pages outlines the generic skills (concepts, skills and attitudes) that are developmentally addressed throughout Levels 16 to 36. In recognizing that students differ in the rate at which they acquire generic abilities, the chart is intended to assist teachers in:

- assessing present levels of student performance
- diagnosing particular areas of deficiency
- sequencing instruction in a manner that will suit students' individual needs and growth patterns.

In using the generic skills scope and sequence, it should be noted that:

- effort has been made to arrange the concepts, skills and attitudes in a linear sequence according to cognitive demand at each level
- the generic skills are **developmental** throughout all three levels; i.e., the spiral approach. **Students will reinforce and extend their understanding of skills developed at the 16-level through their application in more sophisticated and complex settings at the 26- and 36-levels.** (The *Teacher Resource Manual* and the work skills scope and sequence charts for each occupational course provide for the application of generic skills at the 36-level through the occupational courses.)
- the generic skills are **interdependent and are not meant to be taught in isolation.** Although some generic skills may be mastered more effectively through discrete instruction, this approach is not advocated as a primary focus of instruction. The occupational course structure permits a more holistic view of instruction through the linking of strategies and generic and work skills.

OCCUPATIONAL COMPONENT: GENERIC SKILLS

	<u>LEVEL 16</u>	<u>LEVEL 26</u>	<u>LEVEL 36</u>
1. <u>INTRODUCTORY SKILLS</u>			
A. Career Awareness Skills	A.1 Recognizes the nature of the occupational cluster A.2 Identifies a variety of occupations in the career cluster A.3 Identifies concepts, skills and attitudes required in the occupational cluster A.4 Recognizes potential career ladders A.5 Identifies personal interests	A.1 Identifies the scope of local businesses/industries A.2 Selects occupations from career cluster A.3 Describes entry-level requirements A.4 Identifies wages and working conditions A.5 Explores personal job interests	A.1 Identifies related businesses/ industries A.2 Identifies available jobs/careers in interest areas A.3 Identifies personal knowledge and skills A.4 Identifies opportunities for further education/training
B. Job Search Skills	B.1 Recognizes the language of the occupational cluster B.2 Recognizes job opportunities B.3 Identifies the job search as a process B.4 Identifies personal career goals B.5 Identifies job requirements: • physical • emotional • time • tools B.6 Identifies personal abilities	B.1 Defines business-/industry-related terms B.2 Locates job opportunities B.3 Lists the sequence of tasks in the job search strategy B.4 Matches personal interests to job requirements B.5 Introduces self to local business/industry operations B.6 Obtains job application forms B.7 Recognizes the purpose of networking B.8 Compares wages and working conditions with other related jobs	B.1 Reviews business-/industry-related terms B.2 Writes letters of application B.3 Prepares a résumé B.4 Completes application forms B.5 Identifies and contacts references B.6 Practices networking B.7 Practices job interview techniques B.8 Applies for a job B.9 Identifies related unions and associations
C. Human Relations Skills	C.1 Recognizes the meaning of "human relations" C.2 Identifies strategies to enhance peer relationships C.3 Identifies strategies to enhance relationships with others	C.1 Defines "human relations", "personality" and "traits" C.2 Identifies traits in related occupations C.3 Recognizes appropriate workplace behaviour C.4 Demonstrates the ability to relate to others C.5 Demonstrates ability to accept praise/criticism	C.1 Identifies positive traits in self and others C.2 Demonstrates good interpersonal relationships C.3 Demonstrates personal growth in human relationships C.4 Demonstrates ability to deal with conflict C.5 Demonstrates self-esteem building strategies

	<u>LEVEL 16</u>	<u>LEVEL 26</u>	<u>LEVEL 36</u>
1. <u>INTRODUCTORY SKILLS</u> (cont'd)			
C. Human Relations Skills (cont'd)		C.6 Identifies areas of personal strength/ personal growth C.7 Recognizes appropriate strategies to enhance personal growth C.8 Identifies causes of conflict/cooperation	C.6 Identifies personnel in local businesses/ industries C.7 Establishes contacts with local businesses/industries C.8 Demonstrates appropriate workplace behaviour C.9 Demonstrates appropriate dress for the workplace
D. Sanitation and Environmental Awareness	D.1 Describes "hygiene" and "sanitation" D.2 Describes "personal hygiene" and "public hygiene" D.3 Identifies related health and sanitation standards D.4 Maintains sanitary work area	D.1 Identifies industry-related sanitation practices D.2 Demonstrates personal hygiene D.3 Describes sanitation regulations D.4 Demonstrates public hygiene	D.1 Practices personal hygiene D.2 Demonstrates ability to perform public hygiene practices D.3 Demonstrates sanitary work behaviour D.4 Recognizes how infections and diseases are controlled in local businesses/ industries D.5 Describes occupational health and safety regulations
E. Safety	E.1 Describes "safety" E.2 Practises fire safety E.3 Recognizes need for safety in the work area	E.1 Demonstrates safe practices E.2 Demonstrates safe use of tools and equipment E.3 Demonstrates safe use of supplies E.4 Identifies unsafe work practices E.5 Participates in first aid training	E.1 Demonstrates entry-level safety abilities E.2 Uses equipment, tools and supplies according to manufacturer's instructions
2. <u>ORGANIZATIONAL SKILLS</u>			
A. Work Ethics	A.1 Describes "ethical behaviour" A.2 Recognizes relationship between ethics and human relations A.3 Demonstrates willingness to participate A.4 Demonstrates punctuality and reliability	A.1 Recognizes ethics of related occupations A.2 Demonstrates willingness to practise ethical behaviour A.3 Recognizes the meaning of work A.4 Demonstrates awareness of the needs of others A.5 Demonstrates tolerance and understanding of other cultures A.6 Demonstrates pride in self A.7 Accepts advice	A.1 Describes work ethics of related occupations A.2 Demonstrates ethical behaviour A.3 Demonstrates willingness to work A.4 Demonstrates dependability A.5 Demonstrates concern for others A.6 Demonstrates pride in work A.7 Follows instructions/directions

	<u>LEVEL 16</u>	<u>LEVEL 26</u>	<u>LEVEL 36</u>
2. <u>ORGANIZATIONAL SKILLS</u> (continued)			
B. Planning and Organizing	B.1 Describes "planning" and "organizing" sequence of a task B.2 Identifies components and component	B.1 Develops a basic task plan B.2 Implements a basic task plan B.3 Evaluates the outcome of task plan implementation B.4 Recognizes the meaning of "feedback"	B.1 Develops a complex task plan B.2 Follows a task plan B.3 Implements a complex task plan
C. Time Management	C.1 Describes "time management" C.2 Demonstrates dependability	C.1 Identifies time-task relationship C.2 Demonstrates effective time management	C.1 Demonstrates time-task management skills C.2 Meets task deadlines
D. Task Management	D.1 Describes "task management" D.2 Demonstrates willingness to learn D.3 Demonstrates interest in the occupational area	D.1 Demonstrates perseverance D.2 Prepares tools and supplies required for the task D.3 Practices positive work habits D.4 Defines the practice of service in the service industries	D.1 Works to specifications D.2 Uses equipment, tools and supplies correctly D.3 Conserves supplies D.4 Cleans work area when task is completed D.5 Demonstrates service
E. Work Standards	E.1 Describes "work standards" E.2 Identifies work standards used in related occupations E.3 Appreciates need for control and quality checks	E.1 Describes work standards used in related occupations E.2 Demonstrates acceptable work standards E.3 Describes the relationship among work standards, service and profit	E.1 Works to specified standards E.2 Demonstrates initiative
3. <u>COMMUNICATION SKILLS</u>			
A. Communication Skills	A.1 Describes "communication" A.2 Identifies forms of communication A.3 Recognizes the relationship between verbal and non-verbal communication A.4 Follows verbal instructions A.5 Asks questions A.6 Recognizes occupation-related communication techniques	A.1 Recognizes appropriate/inappropriate forms of verbal communication A.2 Recognizes appropriate/inappropriate forms of non-verbal behaviour A.3 Communicates effectively with peers, teachers and others A.4 Initiates telephone calls A.5 Records telephone call information correctly	A.1 Identifies types of communication in local businesses/industries A.2 Demonstrates ability to communicate effectively A.3 Demonstrates effective interview strategies A.4 Uses the telephone correctly
4. <u>READING SKILLS</u>			
A. Reading Skills	A.1 Identifies resource centres A.2 Recognizes the variety of resources A.3 Follows written instructions A.4 Locates references	A.1 Uses occupation-related terms A.2 Identifies occupation-related literature A.3 Obtains access to resources in community resource centres A.4 Interprets and follows written instructions	A.1 Reads and interprets occupation-related literature A.2 Reads related health and safety documents A.3 Reads terms of employment documents A.4 Uses resource centres A.5 Follows written instructions specific to the occupational area A.6 Deals with conflicting instructions

	LEVEL 16	LEVEL 26	LEVEL 36
5. <u>WRITING SKILLS</u> A. Writing Skills	A.1 Recognizes the need for basic writing skills A.2 Writes complete sentences A.3 Completes application for Social Insurance Number (SIN)	A.1 Describes uses of writing skills in related occupations A.2 Writes in complete sentences and paragraphs A.3 Writes a letter of inquiry A.4 Writes a letter of thanks A.5 Completes a job application form	A.1 Writes in related paragraphs A.2 Writes a résumé A.3 Writes a job description A.4 Submits job application forms
6. <u>MATHEMATICAL SKILLS</u> A. Mathematical Skills	A.1 Reads numbers to six digits A.2 Adds, subtracts, multiplies and divides A.3 Uses whole numbers, fractions and decimals A.4 Uses metric units of measurement A.5 Uses non-metric units of measurement when necessary	A.1 Uses SI metric units of measurement A.2 Uses imperial and U.S. units of measurement where necessary A.3 Performs basic numeric calculations using whole numbers, fractions and decimals A.4 Uses appropriate strategies to calculate ratio, proportion and per cent A.5 Counts money to \$1000 A.6 Makes change to \$100	A.1 Uses SI metric units of measurement A.2 Uses imperial units of measurement A.3 Solves practical mathematical problems A.4 Applies ratio, proportion and per cent in occupational contexts A.5 Calculates hourly, weekly and monthly income A.6 Calculates costs, sales, profits A.7 Handles cash, cheques and credit transactions
7. <u>VISUAL SKILLS</u> A. Visual Skills	A.1 Identifies signs and symbols common across occupations A.2 Reads charts and graphs A.3 Shows creative potential (E)	A.1 Interprets occupation-related signs and symbols A.2 Interprets charts and graphs and describes their purposes A.3 Creates/designs a visual representation of a project or process (E)	A.1 Responds appropriately to occupation-related signs and symbols A.2 Constructs a chart or graph related to an occupational area A.3 Creates an occupation-related design or product (E)
8. <u>ENTREPRENEURSHIP</u> A. Entrepreneurial Awareness	A.1 Defines "entrepreneurship", "entrepreneur" A.2 Identifies small businesses in the community A.3 Recognizes entrepreneurship as a potential career path	A.1 Recognizes entrepreneurial opportunities A.2 Recognizes common characteristics of small businesses A.3 Identifies advantages and disadvantages of being in business A.4 Recognizes cost of operating a business A.5 Appreciates that not all money earned is profit A.6 Identifies business opportunities related to personal abilities and interests A.7 Identifies abilities required to establish a business A.8 Develops a business plan and operates a small business (E)	A.1 Identifies local entrepreneurs A.2 Identifies traits of entrepreneurs A.3 Identifies steps necessary to start a small business A.4 Initiates a small business (E)

(E) = Elective Component

	<u>LEVEL 16</u>	<u>LEVEL 26</u>	<u>LEVEL 36</u>
9. <u>FIELD EXPERIENCES</u>			
A. Field Experiences	A.1 Participates in field experiences A.2 Demonstrates satisfactory behaviour during community partnerships	A.1 Orients self to the workplace A.2 Demonstrates appropriate work habits A.3 Uses safe and sanitary practices A.4 Demonstrates pride in self A.5 Demonstrates pride in work performance A.6 Shows respect for others A.7 Respects the property of others	A.1 Prepares for employment through community partnership activities A.2 Demonstrates appropriate work habits A.3 Demonstrates effective human relations techniques in the workplace A.4 Practises safety in the workplace A.5 Demonstrates acceptable verbal and non-verbal communication skills A.6 Practises personal and public hygiene procedures A.7 Demonstrates entry-level competency in the use of equipment and tools A.8 Uses supplies correctly A.9 Follows good storage practices A.10 Demonstrates pride in work A.11 Demonstrates willingness to work A.12 Demonstrates respect for others A.13 Follows accepted principles and procedures A.14 Recognizes opportunities for further education/training
10. <u>WORK SKILLS</u>	The work skills component for each occupational course consists of both prescribed and elective components. The required components are outlined below. Both the required and elective work skills are stated in the scope and sequence chart provided for each occupational course in this document.		
A. Identification	A.1 Identifies job scope A.2 Identifies equipment, tools and supplies	A.1 Lists and describes related jobs A.2 Lists and describes equipment, tools and supplies	A.1 Selects a career path A.2 Recognizes equipment, tools and supplies
B. Equipment, Tools and Supply Usage	B.1 Demonstrates safe use of equipment, tools and supplies B.2 Selects appropriate materials for the job B.3 Uses correct methods to produce a product or to provide a service	B.1 Demonstrates safe use of equipment, tools and supplies	B.1 Uses equipment, tools and supplies correctly
C. Work Standards	C.1 Identifies and works to accepted standards D.1 Manages supplies efficiently	C.1 Works to accepted standards D.1 Manages supplies efficiently	C.1 Works to accepted standards D.1 Manages supplies efficiently
D. Supply Management			
E. Work Area Management	E.1 Maintains work area in a safe and sanitary condition	E.1 Maintains work area in a safe and sanitary condition	E.1 Maintains a professional work area

PROGRAM OF STUDIES/ PRESENTATION OF CONTENT

The IOP Occupational Component Profile: 36-Level Courses outlines the CONCEPTS and RELATED SKILLS AND ATTITUDES; i.e., this provides the detail for the top face of the development model. Each concept is a main heading for a family of related attitudes and skills. Together, a concept and its related attitudes and skills form an instructional strand. For example:

VISUAL SKILLS	1 Responds appropriately to occupation-related signs and symbols	2 Constructs a chart or graph related to an occupational area	3 Creates an occupation-related design or product (E)
----------------------	---	--	--

The related attitudes and skills are arranged in order of priority; however, teachers are encouraged to be flexible when planning for instruction and when integrating the teaching of each related skill:

- into the context of each practical arts learning activity
- into a sequence that best meets the needs of students.

The profile identifies ten concepts and their related attitudes and skills. Concepts 1–9 are categorized as generic; that is, they apply to each and every learning activity. Concept 10, Work Skills, identifies the concepts, skills and attitudes that are transferable among two or more occupational clusters comprising the senior high occupational component of the Integrated Occupational Program.

The curricular content in this guide is presented in a four-column format.

- Column one, Learning Objectives, outlines the concepts, skills and attitudes that students should be able to demonstrate after successfully completing an occupational course. The shaded portions represent the program of studies.

The learning objectives are numbered following the sequence indicated in the IOP Occupational Component Profile: 36-Level Courses. These objectives relate to the following concepts.

- | | |
|--------------------------|------------------------|
| 1. Introductory Skills | 6. Mathematical Skills |
| 2. Organizational Skills | 7. Visual Skills |
| 3. Communication Skills | 8. Entrepreneurship |
| 4. Reading Skills | 9. Field Experiences |
| 5. Writing Skills | 10. Work Skills |

- Column two, Related Life Skills, provides teachers with indications of life skills related to each learning objective. These related life skills are designed to assist teachers to introduce students to new material by relating it to previously acquired learning.
- Column three, Related Applications Across the Curriculum, indicates how cooperative unit and lesson planning will facilitate improved student learning of related concepts, skills and attitudes in core and complementary courses.
- Column four, Suggested Strategies/Activities, identifies a number of teaching strategies and activities that may be used to enhance the teaching/learning process. In this context, teachers are encouraged to assess the needs of their students and to use, adapt, complement, supplement the strategies and activities suggested with others that best meet the needs of their students.

OCCUPATIONAL COMPONENT PROFILE: 36-LEVEL COURSES

INTRODUCTORY SKILLS (1)	1	A. CAREER AWARENESS SKILLS Identifies related businesses/industries	2	Identifies available jobs/careers in interest areas	3	Identifies personal knowledge and skills	4	Identifies opportunities for further education/training
	1	B. JOB SEARCH SKILLS Reviews business-/industry-related terms	2	Writes letters of application	3	Prepares a résumé	4	Completes application forms
	5	Identifies and contacts references	6	Practises networking	7	Practises job interview techniques	8	Applies for a job
	9	Identifies related unions and associations						
	1	C. HUMAN RELATIONS SKILLS Identifies positive traits in self and others	2	Demonstrates good interpersonal relationships	3	Demonstrates personal growth in human relationships	4	Demonstrates ability to deal with conflict
	5	Demonstrates self-esteem building strategies	6	Identifies personnel in local businesses/industries	7	Establishes contacts with local businesses/industries	8	Demonstrates appropriate workplace behaviour
	9	Demonstrates appropriate dress for the workplace						
	1	D. SANITATION AND ENVIRONMENTAL AWARENESS Practises personal hygiene	2	Demonstrates ability to perform public hygiene practices	3	Demonstrates sanitary work behaviour	4	Recognizes how infections and diseases are controlled in local businesses/industries
	5	Describes occupational health and safety regulations						
	1	E. SAFETY Demonstrates entry-level safety abilities	2	Uses equipment, tools and supplies according to manufacturer's instructions				

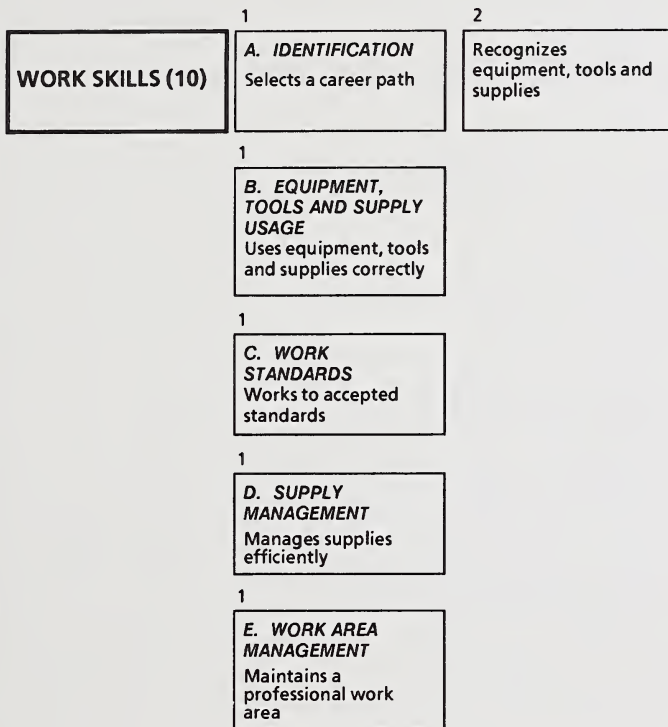
OCCUPATIONAL COMPONENT PROFILE: 36-LEVEL COURSES (continued)

ORGANIZATIONAL SKILLS (2)	1	A. WORK ETHICS Describes work ethics of related occupations	2	Demonstrates ethical behaviour	3	Demonstrates willingness to work	4	Demonstrates dependability
	5	Demonstrates concern for others	6	Demonstrates pride in work	7	Follows instructions/directions		
	1	B. PLANNING AND ORGANIZING Develops a complex task plan	2	Follows a task plan	3	Implements a complex task plan		
	1	C. TIME MANAGEMENT Demonstrates time-task management skills	2	Meets task deadlines				
	1	D. TASK MANAGEMENT Works to specifications	2	Uses equipment, tools and supplies correctly	3	Conserves supplies	4	Cleans work area when task is completed
COMMUNICATION SKILLS (3)	5	Demonstrates service						
	1	E. WORK STANDARDS Works to specified standards	2	Demonstrates initiative				
	1	A. COMMUNICATION SKILLS Identifies types of communication in local businesses/ industries	2	Demonstrates ability to communicate effectively	3	Demonstrates effective interview strategies	4	Uses the telephone correctly
READING SKILLS (4)	1	A. READING SKILLS Reads and interprets occupation-related literature	2	Reads related health and safety documents	3	Reads terms of employment documents	4	Uses resource centres
	5	Follows written instructions specific to the occupational area	6	Deals with conflicting instructions				

OCCUPATIONAL COMPONENT PROFILE: 36-LEVEL COURSES (continued)

WRITING SKILLS (5)	1	A. WRITING SKILLS Writes in related paragraphs	2	Writes a résumé	3	Writes a job description	4	Submits job application forms
	1	A. MATHEMATICAL SKILLS Uses SI metric units of measurement	2	Uses imperial units of measurement	3	Solves practical mathematical problems	4	Applies ratio, proportion and per cent in occupational contexts
	5	Calculates hourly, weekly and monthly income	6	Calculates costs, sales, profits	7	Handles cash, cheques and credit transactions		
	1	A. VISUAL SKILLS Responds appropriately to occupation-related signs and symbols	2	Constructs a chart or graph related to an occupational area	3	Creates an occupation-related design or product (E)		
ENTREPRENEURSHIP (8)	1	A. ENTREPRENEURIAL AWARENESS Identifies local entrepreneurs	2	Identifies traits of entrepreneurs	3	Identifies steps necessary to start a small business	4	Initiates a small business (E)
	1	A. FIELD EXPERIENCES Prepares for employment through community partnership activities	2	Demonstrates appropriate work habits	3	Demonstrates effective human relations techniques in the workplace	4	Practises safety in the workplace
FIELD EXPERIENCES (9)	5	Demonstrates acceptable verbal and non-verbal communication skills	6	Practises personal and public hygiene procedures	7	Demonstrates entry-level competency in the use of equipment and tools	8	Uses supplies correctly
	9	Follows good storage practices	10	Demonstrates pride in work	11	Demonstrates willingness to work	12	Demonstrates respect for others
	13	Follows accepted principles and procedures	14	Recognizes opportunities for further education/training				

OCCUPATIONAL COMPONENT PROFILE: 36-LEVEL COURSES (continued)



The scope and sequence charts provided in this document (pp. 175–316) outline the suggested work skills for each occupational course.

E = Elective Component

INTRODUCTORY SKILLS – CAREER AWARENESS; JOB SEARCH; HUMAN RELATIONS; SANITATION; SAFETY

CONCEPTS

- Recognizes job/career opportunities:
 - career ladders
 - continuing education/training
 - transferability of concepts, skills and attitudes.
- Devises appropriate job search strategies.
- Demonstrates appropriate workplace behaviour.
- Relates areas for personal growth to career plan.
- Demonstrates occupation-related health and safety practices.
- Identifies the role of unions and associations.

ATTITUDES

- Appreciates the importance of a positive, realistic self-image and good human relations skills.
- Appreciates the need for continuing education/training as a part of the lifelong learning process.
- Follows accepted occupational health and safety practices.
- Displays a positive attitude toward self and the development of improved career awareness, job search, human relations, safety and sanitation skills:
 - works independently, as well as effectively, with others in group situations
 - demonstrates/shares that which has been learned in group discussions, activities and independent study
 - practises strategies for resolving interpersonal conflict
 - communicates personal successes/difficulties relative to tasks that are undertaken
 - demonstrates an attitude of interest/curiosity, taking risks and displaying perseverance in problem situations.

SKILLS

The skills related to **INTRODUCTORY SKILLS** are outlined in the Learning Objectives in column one.

LEARNING OBJECTIVES

Related Life Skills

A. CAREER AWARENESS SKILLS

A.1 Identifies related businesses/industries:

- occupational cluster related
- occupational course related.

A.2 Identifies available jobs/careers in interest areas.

Matches community partnership activities to local businesses/industries:

- part-time employment
- field trips
- job shadowing
- mentorship
- guest speakers/demonstrators
- volunteer work.

Locates operations and job opportunities in:

- business directories; e.g., Yellow Pages
- newspapers, journals, notice boards.

Keeps and uses records from previous employment or volunteer work:

- employers/supervisors
- duties performed
- evaluations
- references
- wages and benefits.

Recognizes the importance of maintaining good relationships with previous employers.

Recognizes that the abilities developed during the IOP are transferable among jobs within an occupational cluster and, in some situations, across two or more occupational clusters.

Related Applications Across the Curriculum

Suggested Strategies/Activities

General

Career awareness is a focus within every integrated occupational course. Commencing in Grades 8 and 9, students develop an awareness of potential career fields. In subsequent years, this awareness is further developed through a process of career exploration at Level 16, career orientation at Level 26, and preparation for entry into an occupational cluster at Level 36.

CALM

The CALM curriculum supports and reinforces the generic concepts, skills and attitudes developed throughout each occupational course. (See *Career and Life Management 20: "Careers and the World of Work"*.)

In some schools CALM may be taken by IOP students at the 26-level. Other schools may suggest that IOP students take CALM at the 36-level. The *Integrated Occupational Program Information Manual for Administrators, Counsellors and Teachers* (1991) recommends that CALM be offered to IOP students at the 36-level. CALM may then be used, in part, to review, reinforce and apply the concepts, skills and attitudes previously learned and developed by IOP students.

English

The strands of language (writing, reading, viewing, listening and speaking) and related concepts, skills and attitudes may be appropriately applied and reinforced in each occupational course.

Encourage students to maintain and update a clippings book or bulletin board, to record:

- openings and closings of local businesses/industries
- job opportunities in local businesses/industries
- news items related to local businesses/industries.

Assign students to present to the class a related item from the newspaper or a journal and generate a discussion on the topic.

Encourage students to identify the broad range of job/career opportunities for which the occupational course sequence prepares them, and to evaluate the advantages and disadvantages of each job/career.

Have students reflect on the past two years and identify changes in local business/industry operations.

Discuss:

- Have employment opportunities increased or decreased? Why?
- Is the future for course related businesses/industries good or bad? Why?
- What would I do if there is no job available in my area of interest?

Community Partnerships

Establish community partnerships for both in-school and field experiences to provide students with "real world" information concerning job opportunities and entry-level knowledge, skill and attitude requirements.

Partnerships may include:

- guidance counsellor
- business industry owner/manager
- union representative
- workers
- employees.

LEARNING OBJECTIVES

Related Life Skills

A.3 Identifies personal knowledge and skills.

Analyzes personal strengths and limitations.

Identifies preference for different types of employment:

- I like to work outdoors.
- I don't want to have to "dress up" to go to work.
- I enjoy working with people.
- I'm very creative.
- I like tinkering with tools.
- I love working with animals.

Relates personal hobbies, sports and other enjoyable activities to potential job opportunities.

Strategies may involve:

- demonstrations and field trips
- job shadowing
- visits to or by school graduates in related occupations.

Strategies should assist students to relate present abilities, tasks to future job/career goals.

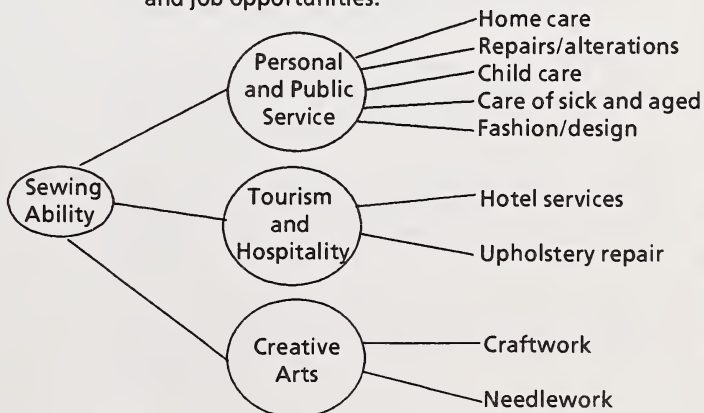
(See *Teacher Resource Manual: Introductory Skills, "Career Awareness"* for additional student activities.)

Have students:

- list their abilities in chart form; e.g.,

Knowledge	Skills	Attitudes
How to sew	Use a sewing machine	Appreciate the value of a quality product

- review the *Easy-to-Read Career Planning Guide* (pp. 1-27) and complete the activities
- work in groups of three or four, share charts and suggest other abilities possessed by classmates
- draw a web or some other visual chart to show the relationship among abilities, career clusters and job opportunities.



English

Relates activities and concepts, skills and attitudes in Theme D: World of Work to personal attributes and employment opportunities.

COURSE: OCCUPATIONAL COMPONENT (IOP Level 36)
INTRODUCTORY SKILLS (1)

LEARNING OBJECTIVES

Related Life Skills

A.3 Identifies personal knowledge and skills.
(continued)

Discuss:

- What knowledge and skills have I acquired in taking this sequence of occupational courses?
- What knowledge and skills have I acquired from taking other occupational courses?
- From what other learning experiences have I acquired my present knowledge and skills?
- What other knowledge and skills will I need to acquire in order to:
 - get the job I want?
 - progress up a career ladder?
- How may I acquire this additional knowledge and develop these other skills?

Community Partnerships

Encourage students to obtain written statements of their abilities by:

- contacting, in person and by letter, community partners for whom they have worked or been in contact with, through job shadowing, mentorship or other field experiences
- maintaining a file of the statements as references for later use.

Discuss the value of developing a network of community partners familiar with their knowledge and skills.

Involve the school counsellor and representatives from a local Alberta Career Development and Employment office in discussions with students.

Use internal and external interest and aptitude inventories to assist students to focus on their strengths and their career aspirations.

Host a career day as a community partnership activity. Encourage students to be active participants in the planning/implementation process.

(See *Teacher Resource Manual: Introductory Skills, "Career Awareness"* for additional student activities.)

LEARNING OBJECTIVES

Related Life Skills

A.4 Identifies opportunities for further education/training.

Identifies family members and friends who are taking, or who have taken, further education/training courses.

Recognizes the value of coaches in sports, arts and other developmental activities.

Appreciates the need for ongoing growth and development of both personal and career skills.

Reads literature related to further education and training; e.g., newspapers, pamphlets, booklets.

Relates volunteer work, part-time employment and self-employment to further education/training; e.g.,

- summer camp counsellor
- child care worker
- gas pump attendant
- coach
- recreation worker
- garden maintenance.

Predicts future employment opportunities:

- in the community
- in Alberta
- across Canada.

Takes an active role in upgrading generic skills and work skills:

- participates in available upgrading programs
- enrolls in further education/training courses that relate to career choice, hobby or interest.

Recognizes that career advancement is often dependent upon improved knowledge, skills and attitudes.

Related Applications Across the Curriculum

Suggested Strategies/Activities

English

Applies process skills (gathering, locating, organizing) to identify community-based continuing educational opportunities.

Shares gathered information with classmates through an oral or multimedia presentation.

Encourage students' awareness that successful completion of the Integrated Occupational Program is a major step in their search for a career. Attainment of the Certificate of Achievement should enable students to:

- use the job search process
- obtain employment
- retain employment
- recognize the need and the opportunities for further education and training.

Discuss:

- What is the purpose of further education/training?
- When should further education/training start?
- Who pays/might pay for further education/training?
- Should further education/training be directly related to present employment? Why or why not?

Community Partnerships

Have students use a variety of community resources to identify local institutions and agencies that offer continuing education/training. Resources may include:

- local telephone and advertising directories
- local newspapers
- literature available from a local:
 - Alberta Career Development and Employment centre
 - institute of technology
 - community college
 - university department of extension
 - private career colleges and vocational schools.

COURSE: OCCUPATIONAL COMPONENT (IOP Level 36)
INTRODUCTORY SKILLS (1)

LEARNING OBJECTIVES

Related Life Skills

A.4 Identifies opportunities for further education/training. (continued)

Invite a representative from these institutions or agencies to discuss the importance and opportunities for further education and training.

Encourage students to visit further education/training institutions and investigate:

- courses offered
- enrolment procedures and times
- costs; e.g., instruction, books, equipment, tools and supplies.

Invite local business/industry representatives to discuss the significance of technological and other changes in the workplace, particularly the effects of change on employment and career opportunities.

Encourage students to:

- investigate recent changes in the workplace
- predict possible future changes
- explain how they hope to meet the challenge of changes in the workplace
- explore the opportunities provided by different employers for employees' further education/training.

(See *Teacher Resource Manual: Introductory Skills, "Career Awareness"* for additional student activities.)

LEARNING OBJECTIVES

Related Life Skills

B. JOB SEARCH SKILLS

B.1 Reviews business-/industry-related terms.

Understands the difference between the varying levels of employment used in some businesses/industries; e.g.,

- unskilled worker
- entry-level worker
- apprentice
- skilled worker/journeyman
- self-employed worker/entrepreneur.

Uses and understands the meaning of occupational terms.

Calls equipment, tools and supplies by their proper names.

Communicates effectively and appropriately with others in the workplace.

Demonstrates the ability to use related jargon correctly during job interviews.

Related Applications Across the Curriculum

English

Brings to class samples of non-confidential documents and other reading materials used at the workplace.

Applies a variety of strategies designed to enhance employment-related vocabulary, such as:

- using a pocket dictionary
- storing terms using a mind map or semantic web
- relating unfamiliar vocabulary to familiar terms.

Suggested Strategies/Activities

Have students:

- review the lists of related terms collected during previous courses in this course sequence
- revise and add additional terms to the list
- define key terms orally and in writing
- role play different on-the-job situations, using the appropriate language of the business, trade or industry.

Community Partnerships

Invite community partners to:

- discuss the use of jargon in their business, trade or industry
- provide examples of key terms that entry-level workers should know and be able to use
- relate the use of jargon to human relations in the workplace.

Encourage students to maintain a logbook/diary of new terms they encounter in the workplace, and to share new terms with classmates; e.g.,

- presenting new terms and their definitions to the class
- adding to a list of terms and definitions posted on a classroom/lab notice board.

Using community resources, have students:

1. Define the following terms:

- | | |
|------------|--------------------|
| ● business | ● apprentice |
| ● industry | ● journeyman |
| ● trade | ● traditional/non- |
| ● job | traditional |
| ● career | occupations |
| ● employee | ● entrepreneur |
| ● employer | ● technology. |

2. Describe the services provided by:

- Alberta Career Development and Employment
- community colleges
- private vocational (trade) schools.

3. Discuss the opportunities for IOP graduates to:

- obtain an apprenticeship
- become journeymen
- enter into traditional and non-traditional occupations.

COURSE: OCCUPATIONAL COMPONENT (IOP Level 36)
INTRODUCTORY SKILLS (1)

LEARNING OBJECTIVES

Related Life Skills

B.1 Reviews business-/industry-related terms.
(continued)

Related Applications Across the Curriculum

Suggested Strategies/Activities

Review the job search skills explored at Level 16 and further developed in Level 26 occupational courses; e.g.,

<u>Lists</u>	● interests ● abilities ● work goals ● work requirements
<u>Matches</u>	● interests and abilities to work goals and requirements
<u>Selects</u>	● job ● job location
<u>Searches</u>	● letters of application ● personal contacts ● advertisements ● identifies and obtains references
<u>Interviews</u>	● prepares for interview ● participates in interview
<u>Receives Feedback</u>	● obtains the job ● is denied the job ● retains the job.

Have students extend the inventory from the previous unit to include:

- matching their interests and abilities to a job
- selecting a career or a specific job
- using role play techniques, tell everyone you know that you're looking for a job.

Encourage students to use the full job search process to seek part-time or full-time employment, including volunteer work.

Finding a job is like solving a complex problem. Explain the purpose and how to use a social problem-solving strategy in relation to the job search process. (See *Teacher Resource Manual: Suggested Teaching Strategies*, "SPOT: A Social Problem-Solving Strategy".)

COURSE: OCCUPATIONAL COMPONENT (IOP Level 36)
INTRODUCTORY SKILLS (1)

LEARNING OBJECTIVES

Related Life Skills

- B.2 Writes letters of application.
- B.3 Prepares a résumé.
- B.4 Completes application forms.

Reviews letters, résumés and forms used to obtain previous employment or volunteer positions.

Appreciates the importance of:

- written forms of communication
- properly prepared and legibly written communications.

Related Applications Across the Curriculum

Suggested Strategies/Activities

Brainstorm with students the most recent strategies they used to find and get a part-time job. Focus on:

- letters of application
- résumé preparation
- type of application forms completed
- how references were identified, obtained and used.

For some students, the visual as well as the verbal presentation of this information helps to reinforce learning. For examples of visual presentations, see *Teacher Resource Manual: Visual Skills and Suggested Teaching Strategies*, "Flow Charting".

Read: *The Easy to Read Career Planning Guide* (pp. 30, 36–38).

English

Relates and uses activities completed in Theme D: World of Work to enhance employment-related writing tasks.

Have students:

1. Practise writing letters of application to different employers:
 - in response to a newspaper advertisement
 - a letter of inquiry about possible employment opportunities
 - a letter of application that will serve as a covering letter when sent with a résumé.
2. Practise preparing a résumé:
 - identify the basic purpose and structure of a résumé
 - prepare a basic résumé
 - modify the basic résumé to meet the anticipated needs of different employers.
3. Practise completing application forms:
 - simple application form
 - detailed application form
 - check the correctness and neatness of the information
 - type the information, where possible
 - respond appropriately to the open-ended sections of an application form. (In these sections, prospective employees are given the opportunity to advertise their abilities, tell why they would like to work for the employer/company, etc.)

LEARNING OBJECTIVES

Related Life Skills

- B.2 Writes letters of application. (continued)
- B.3 Prepares a résumé. (continued)
- B.4 Completes application forms. (continued)

Use of Technology

Where available, encourage students to prepare letters, résumés, etc., using a computer. Stress that the computer is a major part of the Information Age and should be recognized as a useful tool in all occupations.

Discuss the effect of well prepared and poorly prepared written communications on prospective employers.

Have students provide examples of both good and poor communiques and then role play the possible effects of these in a job interview situation, and on a prospective employer before he or she decides to interview a potential employee.

(See *Teacher Resource Manual*: Introductory Skills, "Job Search Skills" for additional student activities and sample letters of application, résumés and application forms.)

COURSE: OCCUPATIONAL COMPONENT (IOP Level 36)
INTRODUCTORY SKILLS (1)

LEARNING OBJECTIVES

Related Life Skills

B.5 Identifies and contacts references:

- teachers
- friends
- previous employers
- family doctor/dentist
- minister
- volunteer coordinators.

Appreciates the number of people who could be potential references.

Recognizes that references are given by people who know about your abilities:

- generic skills; e.g., communication skills, human relations skills, work ethics, organizing and planning skills
- work skills; e.g., ability to handle properly; equipment, tools and supplies; safety awareness and practices.

Appreciates that good references are earned through positive personal and work relationships.

B.6 Practises networking.

Recognizes that a network consists of people with whom one has had contact.

Appreciates that everyone has contacts; e.g.,

- teachers
- relatives
- friends
- previous employers/volunteer coordinators.

Appreciates that people in a network may be asked to act as references.

Related Applications Across the Curriculum

Suggested Strategies/Activities

English

Applies appropriate speaking skills when asking people for references in person or over the telephone.

Retains a list of people, groups and institutions that may be useful for gaining employment, seeking information, etc.

Updates network list on a regular basis using computer software.

Have students discuss:

- Why are references important?
- Are there different types of references? What are the different types?
- What is the difference between a personal reference and a professional reference?
- Is a reference:
 - a. sent by mail to a prospective employer?
 - b. given by hand to the person addressed in the reference?
- Which would you prefer, "a" or "b"? Why?

Use of technology:

- use a computer to develop a data base of possible references/networks
- contact potential references through the use of facsimile machines.

Have students identify the people in their network:

- list the people they know, including family, teachers, friends, past employers, etc.
- categorize the list into potential personal or professional references
- indicate those persons on the list most likely to provide a good reference; e.g.,

People I Know	References			
	Personal	Good (G)	Professional	Good (G)
Family Doctor	✓	G		
English Teacher	✓	G	✓	G
Occupational Course Teacher	✓	G	✓	G
Previous Employer			✓	G

LEARNING OBJECTIVES

Related Life Skills

B.6 Practises networking. (continued)

Community Partnerships

Invite community partners to discuss:

- the importance of references
- what they look for in a reference
- how networking is used in the world of business and industry
- when references should be sent or given to a prospective employer.

Have students:

- write letters to people within their network, requesting a reference
- telephone and request a written reference
- speak with teachers and support staff within the school to establish and promote networks
- maintain a log of people who might provide a reference in the future.

Encourage students who are seeking part-time or full-time employment to:

- tell everyone they know that they are looking for a job
- read classified job advertisements in local publications
- recognize that many jobs are not advertised
- continue to add to their list of people within their network.

LEARNING OBJECTIVES

Related Life Skills

B.7 Practises job interview techniques.

Initiates conversation and responds to questions.

Participates in discussions:

- at home
- in school
- in the workplace.

Dresses appropriately for the task, job, activity.

Maintains health and personal grooming.

Projects a positive attitude and image.

B.8 Applies for a job:

- uses appropriate strategies:
 - a. to identify:
 - personal interests and abilities
 - job opportunities
 - b. to match present interests and abilities to the job
 - c. to write a résumé, letters of application and thank you letters
 - d. to participate in job interviews
 - e. to write follow-up letters.

Follows a plan:

- identifies the components of a task; e.g., the job search process
- arranges the components in order/sequence of priority
- carries out the plan
- evaluates the outcome
- revises the plan for use in subsequent situations.

Related Applications Across the Curriculum

Suggested Strategies/Activities

English

Reviews asking, answering, listening and speaking skills used in Themes B and D.

Interviews classmates, family members, co-workers, etc., using instruments in Theme D or self-generated question sheets.

Uses materials developed in Theme D and alters as required for specific employment opportunities.

Read *The Easy to Read Career Planning Guide*, pp. 39–41.

Have students:

- brainstorm and list:
 - ways to prepare for an interview
 - types of questions that may be asked by the interviewer
 - types of questions that may be asked by the interviewee
- practise responding to different questions, orally and in writing
- describe the appropriate ways to present oneself to an interviewer; e.g., clothes, appearance, hair, posture
- discuss how to handle difficult questions and questions that appear to be unethical (see *Teacher Resource Manual*, Organizational Skills, "Work Ethics")
- discuss how to focus discussion on their strengths and to minimize feelings of nervousness
- role play the role of both an interviewer and an interviewee.

Encourage students to view the job search procedure as a process that requires them to plan, solve problems and make decisions.

Have students:

- practise each step of the process until they feel confident in their ability to use each step
- recognize that they have abilities that an employer needs and to present themselves with confidence, but not overconfidence
- prepare follow-up letters to thank the interviewer for granting the interview and, where appropriate, for offering the job.

LEARNING OBJECTIVES

Related Life Skills

B.9 Identifies related unions and associations.

Gives examples of past and present group memberships; e.g.,

- youth club
- cadets
- church group
- choir.

Recognizes the value of belonging to a formal group; e.g.,

- trade, business association
- labour union.

Understands the role of labour unions in the workplace.

English

Gathers information from various community sources to enhance personal knowledge about employment-related institutions and activities.

Community Partnerships

Invite community partners to:

- participate in mock job interview situations
- discuss the purpose of the interview
- suggest ways in which an interviewee can overcome nervousness and make an appropriate impression on the interviewer.

(See *Teacher Resource Manual*: Introductory Skills, "Job Search Skills" for additional student activities.)

Provide a brief history of labour unions and other trade/business associations.

Have students use school and community resources to:

- identify related unions and associations
- obtain information regarding membership in a related union:
 - purpose
 - need
 - the cost (annual dues) for members.

Discuss:

- Is membership in a union/association required in this occupation/occupational cluster?
- What are the advantages and disadvantages of union membership?
- What happens to a worker who is not a member of a union?

(See *Teacher Resource Manual*: Introductory Skills, "Job Search Skills".)

LEARNING OBJECTIVES

Related Life Skills

C. HUMAN RELATIONS SKILLS

C.1 Identifies positive traits in self and others.

Knows the meaning of "human relations".

Recognizes that each person has positive traits.

Shows respect for others and appreciates cultural differences.

Recognizes common characteristics of effective workers in related occupations:

- technical and craft skills and/or appreciation of the land and nature may be common traits of agricultural workers
- good organizational skills and a pleasing personality are characteristics common to business and office workers
- construction and fabrication workers usually possess technical, mechanical and/or craft skills
- craftsmanship, artistic ability and creativity are common traits among creative art workers
- workers in the natural resource industries tend to be physically fit and to enjoy working in outdoor wilderness areas
- a pleasant personality and the desire to provide service and care to others are traits common to workers in the personal and public service occupations
- tourism and hospitality workers are characterized as those who enjoy working with food and beverages and/or enjoy providing services to others
- workers in transportation related occupations commonly possess technical skills and good driving ability.

Related Applications Across the Curriculum

Suggested Strategies/Activities

General

The development of good human relations skills has applications throughout the Integrated Occupational Program.

CALM

The concept and the skills related to human relations building are reinforced in CALM.

English

Applies group interaction skills developed in Theme A to specific employment-related situations; e.g.,

- respects the opinions of others
- recognizes that the experiences of others may result in differing points of view
- forms an opinion based on input from a variety of sources.

The following activity may have been used in Level 16 occupational courses. However, its expanded use at the 36-level is designed to make students aware of their own and others' personal growth.

Identifying Positive Traits

1. a. Provide students with a lined card (12.5 cm × 20 cm) and ask them to create two columns. Head one column "Strong Traits" and the other "Weak Traits".

b. Have students list their strengths in the appropriate column, and the areas in which they believe they can achieve growth in the other column.
Note: Activities "a" and "b" may be done using a computer.

c. Compare strong and weak traits. Ask students to share their analyses.

d. Discuss: "Why do some people focus on their weaknesses and forget about their strengths?"

e. On the other side of the card, ask students to analyze their attitudes toward self and others.

f. Discuss: "How can we change our attitudes?"

g. Have students keep a journal of activities undertaken to improve personal growth.
2. Have each student use a similar procedure (1a-g) to identify, list and discuss the positive traits in a classmate.

(See *Teacher Resource Manual*, Introductory Skills, "Human Relations Skills" for additional student activities.)

COURSE: OCCUPATIONAL COMPONENT (IOP Level 36)
INTRODUCTORY SKILLS (1)

LEARNING OBJECTIVES

Related Life Skills

C.2 Demonstrates good interpersonal relationships.

Accepts that entry-level employees must follow directions given by the supervisor or employer.

C.3 Demonstrates personal growth in human relationships.

Understands that his or her workplace behaviour will often impact on the success or failure of others in the work area.

C.4 Demonstrates ability to deal with conflict.

Responds positively to constructive criticism; e.g., "I know I can do better. I'll try to do better next time."

C.5 Demonstrates self-esteem building strategies.

Is able to recognize areas of personal strength and areas where growth is possible.

Considers the possible outcomes of demonstrating positive as opposed to negative behaviours.

Is able to deal appropriately with conflict-creating situations.

Related Applications Across the Curriculum

Suggested Strategies/Activities

English

Applies appropriate problem-solving strategies when dealing with conflicts in the home, the workplace and the community.

Relates problem-solving strategies identified in literature and media (Themes A and C) to everyday experiences; e.g.,

- Identifies and evaluates a problem-solving strategy used by characters in a television program. Generates alternative strategies and predicts outcomes.

The ability to relate well to adults and peers requires practice. Students should, therefore, be given opportunities to talk with adults. In dealing with their peers, students should be encouraged to elevate their standards of social interaction.

Creating Good Relationships: Divide students into small groups. Have each group select a recorder and then brainstorm to find:

- the different types of work relationships that they are or were involved in
- the different types of non-work relationships that they are involved in
- after 5–10 minutes, have each group's recorder present to the class a summary of relationships identified.

Have students lead discussions on:

- adapting to personality traits and cultural differences in the workplace
- adapting to personality traits and cultural differences in non-work relationships.

Employer–Employee Relations: Discuss the respective roles and responsibilities of the employer and the employee in relation to a particular job.

Role play employer/employee roles in the context of:

- congratulating an employee for demonstrated leadership qualities
- looking for a job
- being interviewed for a job.

Ask students to discuss their feeling when:

- applying for a job
- being interviewed
- being reprimanded.

COURSE: OCCUPATIONAL COMPONENT (IOP Level 36)
INTRODUCTORY SKILLS (1)

LEARNING OBJECTIVES

Related Life Skills

- C.2 Demonstrates good interpersonal relationships. (continued)
- C.3 Demonstrates personal growth in human relationships. (continued)
- C.4 Demonstrates ability to deal with conflict. (continued)
- C.5 Demonstrates self-esteem building strategies. (continued)

Identifying the Need for Good Relationships: Aid students to identify:

- need for good relationships in the workplace
- benefits of good relationships
- the type of behaviour that will contribute to good human relations
- the type of behaviour that will not contribute to good human relations.

The SPOT strategy may be used to assist students to recognize and to analyze a social situation before it becomes a problem. (See *Teacher Resource Manual: Suggested Teaching Strategies, "SPOT: A Social Problem-solving Strategy"*.)

The ability to get along with one's peers, family members, teachers, fellow workers and employers is an essential life skill. Many occupations require workers to demonstrate exceptionally high levels of human relations skills in their direct contact with customers; e.g.,

- tourism and hospitality
- personal and public services
- transportation.

In most occupations, the ability to relate well to others, fellow workers and employer, is considered to be an important skill at all levels of employment. Encourage students to offer and accept suggestions through the use of the following interactive learning strategies:

- peer evaluation
- small and large group discussion
- brainstorming.

Simulate an appropriate workplace occurrence and have students:

- role play the scene
- provide feedback on appropriate, inappropriate and alternative behaviours.

COURSE: OCCUPATIONAL COMPONENT (IOP Level 36)
INTRODUCTORY SKILLS (1)

LEARNING OBJECTIVES

Related Life Skills

- C.2 Demonstrates good interpersonal relationships. (continued)
- C.3 Demonstrates personal growth in human relationships. (continued)
- C.4 Demonstrates ability to deal with conflict. (continued)
- C.5 Demonstrates self-esteem building strategies. (continued)

Encourage students to use self-esteem building strategies such as "positive self-talk". (See *Teacher Resource Manual: Suggested Teaching Strategies*, "Positive Self-talk: A Self-concept Building Strategy".)

Community Partnerships

Encourage community partners to participate in small group and class discussions on topics related to effective human relations in the workplace.

Encourage regular participation in in-school activities by representatives from:

- labour unions
- large businesses
- small businesses
- employee staff associations
- parents.

Have students continuously recognize the importance of building good relationships in school, on field experiences, etc.

COURSE: OCCUPATIONAL COMPONENT (IOP Level 36)
INTRODUCTORY SKILLS (1)

LEARNING OBJECTIVES

Related Life Skills

- C.6 Identifies personnel in local businesses/ industries.
- C.7 Establishes contacts with local businesses/ industries.

Uses the local media; e.g., newspapers, radio, television, to gain awareness of key persons in the community.

Attempts to establish contact with key personnel in order to increase a network.

Appreciates the value of knowing who's who in local businesses/industries.

Maintains a record of previous employment and employers and considers past employers as part of a personal network of potential references.

Related Applications Across the Curriculum

Suggested Strategies/Activities

English

Gathers information about employment, using personal/telephone interviews, surveys, observation, etc.

Knowing the names and positions of key personnel in local businesses/industries can assist students during the job search process and while they are in the workplace as a student; e.g., community partnership, field experience, job shadow, mentorship, and as a part-time or full-time employee.

Key personnel may include:

- owner/operator
- manager
- supervisor
- personnel officer.

Have students:

- investigate and compile a log of key personnel, their positions, telephone numbers and addresses
- using networking techniques, keep the log updated
- address letters of application and other communications to key people by using their names; e.g., use "Dear M. Smith", rather than "Dear Sir/Madam"
- discuss the value of addressing key persons by name.

Community Partnerships

Contacts with community partners are integral teaching/learning strategies in occupational courses. Students should be encouraged to initiate contacts with community partners on behalf of the teacher; e.g., guest speakers, demonstrators, mentorships, field experiences, and on their own behalf; e.g., part-time/full-time employment.

Students should:

- maintain a log of community partners with whom they have communicated
- write letters of appreciation
- visit work sites, where appropriate.

COURSE: OCCUPATIONAL COMPONENT (IOP Level 36)
INTRODUCTORY SKILLS (1)

LEARNING OBJECTIVES

Related Life Skills

C.8 Demonstrates appropriate workplace behaviour:

- attitude
- personality
- human relations skills
- communication skills
- work skills.

C.9 Demonstrates appropriate dress for the workplace.

Knows tolerance limits for performance in different job situations.

Understands the meaning of service and punctuality.

Respects the rights and property of others.

Works as a member of a team.

Completes assigned tasks.

Asks for assistance, when required.

Follows instructions and directions.

Knows the right tool for the task.

Works safely and maintains a safe and sanitary work area.

Appropriate workplace behaviour develops over time. Students should be aware that workplace behaviour acceptable in one location may be unacceptable in another location.

Knowledge of the types of workplace behaviours considered appropriate at different locations may best be gained through community partnership activities.

Community Partnerships

Encourage students to visit as many related work sites as possible during the course. Where possible:

- arrange for students to spend time in a variety of related workplaces rather than spend all field experience time at one workplace
- establish an advisory group composed of community partners. This group may be able to facilitate ongoing partnership activities and help to ensure that students receive appropriate learning experiences when engaged in field endeavours.

Have students engaged in field experiences:

- observe workers' behaviours and dress in the workplace
- record their observations
- share and discuss their observations with classmates.

Invite community partners to discuss the following topics:

- the behaviours considered appropriate in my workplace
- dressing for safety and for success
- the importance of staff morale in the workplace and what both employers and employees can do to ensure good morale
- creating opportunities to climb a career ladder.

(See *Teacher Resource Manual: Introductory Skills, "Human Relations Skills"* for additional student activities.)

LEARNING OBJECTIVES

Related Life Skills

D. SANITATION AND ENVIRONMENTAL AWARENESS

D.1 Practises personal hygiene.

Observes basic rules of hygiene:

- bathes regularly
- eats balanced meals
- exercises regularly
- has regular medical/dental check-ups.

Describes and demonstrates personal hygiene practices specific to occupations; e.g.,

- child and health care
- commercial food preparation
- food service.

D.2 Demonstrates ability to perform public hygiene practices.

D.3 Demonstrates sanitary work behaviour.

D.4 Recognizes how infections and diseases are controlled in local businesses/ industries.

Washes hands regularly:

- before handling food
- before and after providing personal services; e.g., hair care, child care
- after using the toilet.

Wears appropriate clothes for the job:

- hair coverings in food industry
- uniforms in hospitality and caring occupations.

Prevents spread of infection:

- stays at home when warranted; e.g., a bad cold, influenza, infectious disease
- uses appropriate sanitary coverings and gloves, if hand or finger is cut.

Related Applications Across the Curriculum

Suggested Strategies/Activities

General

Throughout the Integrated Occupational Program, students are encouraged to observe the rules and regulations related to health and safety in the home, the school and in the workplace. Appropriate public hygiene practices are modelled and reinforced in each course; e.g., in classrooms, school labs, and in the workplaces of community partners.

Have students brainstorm to:

- review procedures that each person should follow to stay healthy and to protect the health of others
- identify why good personal hygiene practices are important in all occupations and essential in some.

Ask students to provide examples of how personal hygiene practices can affect personal relationships and productivity at home, at school, in the workplace.

Review the concept of personal and public hygiene and have students identify the regulations that apply within the occupational cluster/course.

Community Partnerships

Public hygiene practices may change over time as new technology and information is introduced into business and industry.

Invite community partners to describe current sanitary regulations and requirements in their operations, and discuss the dangers of failing to maintain a sanitary workplace.

Have students:

- investigate and record the sanitization practices associated with related jobs:
 - personal hygiene practices
 - public hygiene practices
- brainstorm to review the effects of compliance and non-compliance with regulations:
 - pollution control
 - food handling
 - plant handling
 - care of children, aged, sick.

Describe and demonstrate, where appropriate, effects of an uncontrolled environment in the home and in the workplace. Related demonstrations may include:

- moulding of food stuffs

LEARNING OBJECTIVES

Related Life Skills

D.5 Describes occupational health and safety regulations.

Each occupation in Alberta is governed by the *Occupational Health and Safety Act*. Many occupations and workplaces are also governed by various sections of the *Public Health Act*.

Students should recognize their right to a safe and sanitary environment and their responsibility to ensure that their behaviour in the home, school, community and workplace contributes to the maintenance of safe and sanitary conditions.

Related Applications
Across the Curriculum

Suggested Strategies/Activities

English

Uses reading and critical thinking skills to enhance comprehension of work-related safety regulations.

- rotting of wood
- peeling of paint
- rusting
- crop infections
- cattle diseases
- human disease carriers
- spread of infections
- identify and list the clothing and other aids to sanitation used by workers in related occupations.

Review appropriate sections of related *Occupational Health and Safety Act*.

Note: The concept of sanitation and environmental awareness is addressed in greater detail in the teacher resource manual. Specific regulations and practices are included, where appropriate, in student workbooks.

LEARNING OBJECTIVES

Related Life Skills

E. SAFETY

E.1 Demonstrates entry-level safety abilities:

- uses equipment, tools and supplies safely
- maintains a safe work area
- is concerned with the safety of self and others.

E.2 Uses equipment, tools and supplies according to manufacturer's instructions.

Practises safety at home, in school, at the work site, and at campsites.

Abides by all work site regulations.

Observes "No Smoking" areas in the workplace and in other public places.

Wears protective clothing when necessary.

Reports unsafe conditions.

Knows what to do in the event of an emergency.

Uses correct tool for the job.

Uses safe practices when handling:

- tools with sharp edges
- power tools and electrical appliances.

Uses correct handling and storage practices when working with:

- food products
- toxic chemicals
- dangerous goods
- chemicals.

Demonstrates basic first aid ability.

Knows what NOT to do:

- use electrical appliances with wet hands
- place hazardous materials near young children
- use tools and equipment without first receiving instruction on correct use practices
- leave inflammable or toxic supplies in improper storage areas.

Related Applications Across the Curriculum

Suggested Strategies/Activities

General

Safety is both a concept and a collection of skills addressed throughout the Integrated Occupational Program. Students are encouraged to develop a sense of personal responsibility, to abide by safety regulations and to follow safe practices when using tools, equipment, chemicals, foodstuffs, etc., in school, at home and in the community.

English

Reads and follows instructions accurately when completing tasks in all environments. Evaluates performance and adjusts behaviour accordingly.

This concept and its related skills should be addressed throughout each occupational course. Students should be encouraged to review the safety objectives covered in previous curricula:

- knows safety rules and regulations
- identifies unsafe conditions
- uses personal safety devices
- recognizes consequences of unsafe acts
- performs pre-use checks
- uses safe operating procedures
- selects the right tool for the job
- reacts to fire hazards
- identifies hazard symbols
- uses chemicals and fuels with care
- knows basic first aid procedures
- is aware of safety features and devices on equipment and in facilities
- knows how to access the emergency response systems in the community.

Relate safety practices to those found in the workplace.

Use the AVID strategy. (See *Teacher Resource Manual: Suggested Teaching Strategies*.)

In each occupational course, emphasize:

- safe use of:
 - tools
 - equipment
 - supplies
 - facilities
 - protective clothing
- safe practice of:
 - procedures
 - techniques
 - tasks
- safe observance of:
 - *Alberta's Occupational Health and Safety Guidelines*
- recognition of unsafe acts and behaviours.

COURSE: OCCUPATIONAL COMPONENT (IOP Level 36)
INTRODUCTORY SKILLS (1)

LEARNING OBJECTIVES

Related Life Skills

E. SAFETY

- E.1 Demonstrates entry-level safety abilities.
(continued)
- E.2 Uses equipment, tools and supplies
according to manufacturer's instructions.
(continued)

Community Partnerships

Occupational Health and Safety is a division of the Alberta Department of Community and Occupational Health:

- invite a representative from this agency to describe occupational health and safety practices used in related workplaces
- invite a representative from the Workers' Compensation Board to discuss similar topics.

The following pamphlets may be used to increase students' awareness of their rights and responsibilities in regard to occupational health and safety: *An Employer's Guide: The Occupational Health and Safety Act; A Worker's Guide: The Occupational Health and Safety Act.*

(Copies of these pamphlets are included in the *Teacher Resource Manual: "Introductory Skills".*)

ORGANIZATIONAL SKILLS: WORK ETHICS, PLANNING AND ORGANIZING, TIME AND TASK MANAGEMENT, WORK STANDARDS

CONCEPTS

- Explains how ethics regulate behaviour.
- Gives examples of how tolerance and understanding of other cultural phenomena can affect human relations and productivity in the workplace.
- Describes the importance of organization, planning, problem-solving and decision-making skills to task performance and productivity.
- Illustrates how occupational standards help to regulate and control production.

ATTITUDES

- Appreciates the importance of time and task management.
- Displays tolerance and understanding toward other cultures.
- Appreciates the value of using standards to evaluate performance and production.
- Appreciates the uses of problem-solving and decision-making skills.
- Displays a positive attitude toward self and the development of organizational skills:
 - works independently, as well as effectively, with others in group situations
 - demonstrates/shares that which has been learned in group discussions, activities and independent studies
 - practises strategies for resolving interpersonal conflict
 - communicates personal successes/difficulties relative to tasks that are undertaken
 - demonstrates an attitude of interest/curiosity, taking risks and displaying perseverance in problem situations.

SKILLS

The skills related to **ORGANIZATIONAL SKILLS** are outlined in the Learning Objectives in column one.

LEARNING OBJECTIVES

Related Life Skills

A. WORK ETHICS

A.1 Describes ethics of related occupations.

Appreciates that a formal or an informal code of ethics guides behaviour:

- in the home
- in school
- in the workplace.

A.2 Demonstrates ethical behaviour.

Shows respect for self and others.

Recognizes rights of others.

Respects individual differences.

Demonstrates honesty and truthfulness.

Does not gossip.

Respects members of both sexes.

Accepts others in his or her circle of friends who may differ in race, religion, ethnic background, language or dress.

Shows tolerance, forgiveness, kindness and understanding.

Demonstrates loyalty.

Takes responsibility for actions.

Shows initiative and leadership in specific situations.

Comes to class on time.

Attends regularly.

Fulfills part-time work and community obligations.

Makes complaints according to correct protocol.

Related Applications Across the Curriculum

Suggested Strategies/Activities

General

A broad spectrum of organizational skills are modelled throughout the Integrated Occupational Program. In core subject areas, these skills are addressed through the methodology rather than as discrete skills for focused instruction.

Similarly, throughout the program, students are encouraged to:

- be tolerant and to understand that cultural diversity is an important part of the fabric of the Canadian mosaic
- develop a more positive self-concept and improved self-esteem in each course
- accept advice
- demonstrate a positive work ethic.

CALM

The following characteristics are addressed in all occupational courses and are reinforced throughout the CALM curriculum:

- ethical and moral characteristics
- intellectual characteristics
- social and personal characteristics.

Have students:

- review the ethical behaviours identified for related occupations
- discuss the purpose of ethics
- consider whether it is an advantage or disadvantage to have a formal (written) code of ethics or an informal (unwritten) code of ethics.

Early in the course, have students brainstorm and negotiate:

- rules for running an orderly shop
- consequences for non-compliance.

Note: Rules should be simple, few in number, and be reached by consensus among class members. "Ownership" of rules and consequences tends to promote and facilitate acceptance and group pressure to conform.

With student assistance, establish a control and monitoring system in the lab. Conduct elections for supervisory positions appropriate to the occupational cluster:

- manager
- foreman
- shop steward.

Have students evaluate themselves and others, discuss the roles played by supervisory personnel and the effect of supervisors on performance and production. (See *Teacher Resource Manual: Organizational Skills, "Work Ethics"*.)

COURSE: OCCUPATIONAL COMPONENT (IOP Level 36)
ORGANIZATIONAL SKILLS (2)

LEARNING OBJECTIVES

Related Life Skills

A.3 Demonstrates willingness to work.

A.4 Demonstrates dependability.

A.5 Demonstrates concern for others.

A.6 Demonstrates pride in work.

A.7 Follows instructions/directions of:

- teachers
- supervisors
- manufacturers.

Demonstrates a positive work ethic.

Works as a member of:

- a team
- a group
- a class.

Understands that stereotyping, gossip and rumours are mostly based on opinion rather than fact and truth.

Likes oneself. Recognizes own abilities.

Is able to identify ways to improve self:

- establishes goals
- formulates plans of action
- dresses for the activity or occasion
- maintains personal health and hygiene
- recognizes need for further education/training.

Seeks advice from significant others.

Listens actively to employer, supervisor or foreman.

Demonstrates appropriate body language when receiving advice.

Reads and follows instructions before using equipment, tools and supplies.

Related Applications Across the Curriculum

Suggested Strategies/Activities

English

Empathizes with co-workers and demonstrates a willingness to assist others.

Have students work cooperatively to create and foster a learning environment that facilitates the development of each student's sense of:

- security
- self-concept/self-esteem
- membership of the group
- purpose
- ability to achieve.

(See *Teacher Resource Manual: Suggested Teaching Strategies, "Improving the Instructional Environment".*) Provide students with opportunities:

- to make choices and decisions
- to assess their own progress and achievements
- to learn by doing
- to increase their awareness of self and others.

English

Monitors personal performance when following oral and written instructions; completing an application form; reading a transportation schedule; balancing a bank book.

Encourage students to seek advice and reinforce their behaviour when they do so; e.g., "Thanks for asking that question." "Well done! Going to the local union office for information was a great idea."

Discuss with students the merits of using award systems in class and in the workplace. Consider using awards. (See *Teacher Resource Manual: Organizational Skills, "Work Ethics".*)

Community Partnerships

Encourage community partners to discuss values, ethics and expectations with students.

Consider establishing/repeating a community "partners in education" appreciation day/evening. Involve students and other staff members in organizing and planning the event and as award recipients. Community partners may be asked to provide awards for outstanding performance by students in areas related to each occupational cluster.

(See *Teacher Resource Manual: Organizational Skills, "Work Ethics"* for additional student activities.)

LEARNING OBJECTIVES

Related Life Skills

B. PLANNING AND ORGANIZING SKILLS

B.1 Develops a complex task plan.

B.2 Follows a task plan.

B.3 Implements a complex task plan:

- completes a project or service
- evaluates the process and the outcome
- accepts constructive feedback.

Relates procedures used in previous tasks to present situations:

- identifies jobs to be done
- identifies equipment, tools, supplies and time needed to get job done
- prepares necessary equipment, tools and supplies prior to starting job
- identifies and obtains help from others where necessary
- breaks jobs down into manageable tasks
- performs tasks in logical order
- evaluates outcomes.

Follows instructions:

- reads blueprints
- uses recipes
- makes models
- mixes chemicals
- adjusts a camera
- cleans a hotel room or office
- assembles furniture from a kit
- performs basic repairs and maintenance.

Completes tasks undertaken.

Related Applications Across the Curriculum

Suggested Strategies/Activities

General

As with many of the other generic skills, the knowledge, skills and attitudes that students need to learn in order to perform satisfactorily in home, school and community roles, can be modelled in all courses throughout the school.

Consistent and regular reinforcement, in all subject areas, of appropriate organizational skills, including planning, ethical behaviour, and time and task management strategies, will tend to encourage students to accept similar expectations of themselves in other situations and contexts.

A primary objective for encouraging students to develop generic skills in each IOP course is to enable them to transfer these learnings from one situation's context to others.

English

Reviews organizational skills used in Theme B when writing a formal report. Applies similar skills to various everyday situations.

Review and reinforce strategies used at the 16- and 26-levels.

- have each student or group of students select a more complex task than those previously completed and identify the equipment, tools and supplies that will be needed, the approximate time to job completion and, where appropriate, the cost of supplies
- have students prepare a checklist of the steps in the procedure
- through individual, group and/or class discussion, identify the best sequence for the identified steps
- have students complete the task and use the sequenced checklist to evaluate each task and the completed project or product.

Encourage students to:

- evaluate their own work
- evaluate the work of others and provide feedback.

Assist students to distinguish between constructive and destructive feedback and to recognize the use of body language as a feedback mechanism.

Community Partnerships

Invite representatives from business and industry to:

- discuss with students the organizational skills that employers expect new employees to demonstrate
- outline the organizational skills required to operate a small business
- provide examples of the effects of:
 - following a plan
 - failing to follow a plan
 - being creative/innovative in refining a plan
- act as mentors to students during the planning, implementation and evaluation phases of the task
- participate in the evaluation of the completed project or product.

(See *Teacher Resource Manual: Organizational Skills, "Planning and Organizing"* for additional student activities.)

LEARNING OBJECTIVES

Related Life Skills

C. TIME MANAGEMENT

C.1 Demonstrates time-task management skills.

C.2 Meets task deadlines:

- uses time wisely
- works consistently
- maximizes time on task.

Arranges tasks in order of priority.

Allows adequate time to complete homework and in-school assignments.

Is aware of the value of others' time.

Completes tasks on time.

Instills confidence in others by being on time.

Takes breaks for allotted time.

Keeps appointments.

Looks for legitimate shortcuts.

Recognizes seasonal/time-related tasks in each occupation.

Makes appointments to reduce waiting time; e.g., car repairs, beauty salon, barber shop.

Records upcoming appointments.

Recognizes that in the world of business "time is money".

Related Applications Across the Curriculum

Suggested Strategies/Activities

General

Time management should be similarly indicated and reinforced in all subject areas; e.g., time on task, attendance and tardiness guidelines.

English

Re-evaluates personal time management using activities and instruments in Theme B.

Time and efficiency practices should be reinforced in each occupational course so students can gain additional practice in standard operating procedures in respect to time control and time on task.

Encourage students to:

- draw a flow chart and indicate approximate time required for each step in the procedure of tasks completed and time taken
- reduce unnecessary motions and efforts
- analyze all work habits
- maintain quality and safety while attempting to decrease job completion time
- work consistently
- keep a logbook of tasks completed; e.g.,

TASK _____					
STUDENT _____					
PROCEDURE	Start		Completion		Teacher/ Supervisor
	Date	Time	Date	Time	
1.					
2.					
3.					
4.					
5.					

Review the relationship of time management skills to:

- productivity
- piecework
- working on commission
- being self-employed.

LEARNING OBJECTIVES

Related Life Skills

- C.1 Demonstrates time-task management skills. (continued)
- C.2 Meets task deadlines. (continued)

Community Partnerships

Where appropriate, involve students in a variety of field experiences to increase their knowledge of the advantages/disadvantages of different time-task-productivity relationships; e.g.,

- piecework
- hourly employees
- commission sales
- self-employment
- fixed income.

Invite community partners to discuss:

- the use of the following time-task management practices:
 - time clocks
 - timecards
 - time sheets
- in what occupations are workers expected to:
 - "clock in and out"/"punch a timecard"?
 - keep a time sheet?
 - account for their time?
- the relationship between time-on-task and productivity
- the impact of absenteeism and tardiness.

While on field experiences, students should be expected to meet the same attendance and punctuality requirements as regular employees. Teachers and community partners should cooperatively establish the times during which a student should be at the work site and ensure that the student:

- makes a schedule of work times
- records days/times worked
- calculates total time worked
- receives reinforcement for positive time management
- faces appropriate consequences for inexcusable absences and tardy attendance.

(See *Teacher Resource Manual*, Organizational Skills, "Time Management" for additional student activities.)

LEARNING OBJECTIVES

Related Life Skills

D. TASK MANAGEMENT

D.1 Works to specifications:

- follows instructions
- makes corrections when necessary
- helps to maintain a safe working environment.

D.2 Uses equipment, tools and supplies correctly.

D.3 Conserves supplies.

D.4 Cleans work area when task is completed.

Reads, interprets and follows:

- instructions
- hazardous materials labels
- safety signs and symbols.

Knows capabilities and takes on jobs that can be:

- performed with existing levels of knowledge and skill
- challenging.

Works well with:

- tools of the trade
- fellow workers
- customers
- sales persons
- services persons.

Asks for assistance, when required.

Is conscious of the safety of co-workers.

Demonstrates self-discipline.

Stays on-task until job is completed.

Assumes "ownership" for performing a quality job and/or producing a quality product.

Works with minimum supervision.

Related Applications Across the Curriculum

Suggested Strategies/Activities

General

Recognition and reinforcement of positive task management behaviours are accepted teaching strategies in all subject areas. An improved level of self-esteem gained in one subject area for effective use of task management strategies may encourage similar positive task management behaviours to be demonstrated in other areas.

In their Level 36 occupational courses, students should be expected to develop entry-level task management abilities.

Encourage students to:

- read the instructions before starting a task
- follow the instructions
- ask for assistance, if they do not understand an instruction.

Students should be judged competent to use a piece of equipment, a tool or a supply item before being allowed to use it without assistance. An item by item competency chart or a comprehensive competency chart may be used to maintain a record of instruction and competencies achieved; e.g.,

COMPREHENSIVE COMPETENCY CHART			
Course _____			
Student _____			
Competency	Competency/date		
	Excellent	Good	Repeat
Equipment Operation			
●			
●			
●			
Tool Operation			
●			
●			
●			
Supply Handling			
●			
●			
●			

LEARNING OBJECTIVES

Related Life Skills

D.5 Demonstrates service.

Appreciates the importance of the service industries.

Recognizes the scope of the service industries.

Provides assistance to others; e.g.,

- helps classmates and co-workers
- aids the young, aged and infirm
- provides volunteer services
- participates in church/community activities.

Related Applications Across the Curriculum

Suggested Strategies/Activities

General

Almost every activity performed on behalf of others contains a service component. Students should be encouraged to recognize the constructive effect of providing/giving a service to others; e.g., helping peers; giving advice, offering praise.

English

Applies appropriate skills and interpersonal strategies when working with others; e.g.,

- peer editing
- group discussions and report writing
- electronic mail.

(See *Teacher Resource Manual: Organizational Skills*, "Task Management" for samples of competency charts.)

Have students take positions of responsibility to ensure the efficient and effective completion of tasks and the safe and sanitary operation of the lab; e.g.,

- lab manager
- supervisor
- shop foreman
- store manager
- safety inspector
- quality control supervisor
- customer service supervisor.

Encourage students to be self-evaluative and to recognize where improvements in task management might be made. In this context, students may be asked to submit weekly or monthly lists of:

- tasks completed
- areas in which improvements have been made
- areas in need of improvement.

Use praise and other reward strategies to motivate students to higher levels of productivity and interest, including:

- bulletin board displays of student work
- certificates of recognition for work well done or for parts of the program completed
- verbal praise and recognition for jobs well done
- student of the week or month awards
- occupational awards at school awards ceremonies
- displays of students' work and skills.

Reinforce the value of self-recognition of work done and how to use "positive self-talk" to motivate themselves to improve performance and production.

<u>LEARNING OBJECTIVES</u>	<u>Related Life Skills</u>
D.5 Demonstrates service. (continued)	

Related Applications Across the Curriculum

Suggested Strategies/Activities

Students should be encouraged to recognize the cost and effect on productivity of proper and improper use of equipment, tools and supplies, and the impact of quality service on different types of business operations.

Have students:

- investigate the cost of:
 - repairing equipment and tools
 - purchasing supply items
 - purchasing new equipment and tools
- calculate the effect on productivity of:
 - inoperable equipment and tools
 - unavailable supplies.

Community Partnerships

Involve community partners to:

- help establish and revise occupation-related task management standards and criteria for evaluation
- participate in evaluating the:
 - students' competencies
 - the course content
 - the use of community partnership activities
- become members of a course/program advisory committee.

Have students involved in field experiences investigate and describe:

- task management practices observed in different workplaces
- examples of quality service
- maintenance schedules
- supply ordering practices.

(See *Teacher Resource Manual: Organizational Skills, "Task Management"* for additional student activities.)

LEARNING OBJECTIVES

Related Life Skills

E. WORK STANDARDS

E.1 Works to specified standards:

- personal standards
- work standards
- supply management standards
- work area management standards
- union/association standards.

The workplace, home, and school provide situations where the student is expected to perform tasks to acceptable standards. These standards are usually determined by others; e.g., employer, parent, teacher. However, life situations arise wherein the student or self-employed person is required to evaluate work completed, and determine whether the quality of the work is acceptable. A person who displays an appropriate level of pride in work completed will set higher standards for that work than would a person who feels less pride in accomplishments.

The student's ability to work to prescribed standards and to establish standards for his or her own performance will appear in such life situations as:

- taking pride in appearance
- trying to achieve higher grades
- maintaining a safe and sanitary work area
- following instructions
- setting progressively higher expectations for own performance in all tasks undertaken
- working to employer's standards in a field experience project
- establishing standards of production in entrepreneurial enterprises; e.g.,
 - quality control
 - cost control
 - service.

Related Applications Across the Curriculum

General

Work standards are integral components of all courses. Teachers are encouraged to plan cooperatively to establish standards that are, wherever possible, reinforced and applied across the curricula.

Consistency in the use of work standards as an evaluative dimension across the curricula will tend to reinforce students' recognition of the need to work to acceptable standards.

Encourage improved student work standards by providing students with clear statements (written and verbal) of what standards are required in each course and how each component of the work standard is to be measured and marked.

Suggested Strategies/Activities

The scope and sequence chart provided for each occupational course in this document identifies the required components of each course. These components are shaded and include the following categories of work skills:

- identification of:
 - job scope
 - equipment, tools and supplies
- equipment, tools and supply usage
- work standards
- supply management
- work area management.

Suggested performance standards and evaluative instruments are provided in the teacher resource manual and in the 36-level student workbooks available for each occupational course. A review of the 16- and 26-level student workbooks might assist in the establishment of additional standards for the work skills at the 36-level.

Throughout the course, provide students with opportunities to learn independently by doing; e.g., putting theory and knowledge into action. Have students:

- initiate projects
- prepare project plans
- write job sheets
- determine evaluative criteria
- produce projects
- evaluate own work
- engage in peer evaluations.

Ask students questions related to their work:

- "Are you pleased with your efforts?"
- "What do you like best about your project?"
- "How would you improve the service next time?"

In developing the practices of quality control and the maintenance of work standards, it is useful to reinforce the concept that these practices relate both to the process as well as to the finished product.

LEARNING OBJECTIVES

Related Life Skills

E. WORK STANDARDS

- E.1 Works to specified standards. (continued)
- E.2 Demonstrates initiative.

Related Applications Across the Curriculum

Suggested Strategies/Activities

English

Identifies expectations regarding communication skills required in the workplace. Evaluates personal performance and adjusts skills accordingly.

Uses self-evaluation and self-monitoring instruments in the *Integrated Occupational Program, Teacher Resource Manual*, English 36 to enhance performance.

Monitors personal performance on an ongoing basis and adjusts performance accordingly.

Process quality factors include:

- keeping working tools and materials in an orderly manner with "a place for everything and everything in its place"
- maintaining a clean, neat work space not only looks professional, the practice also improves safety and increases efficiency
- working according to generally accepted rules:
 - Workers' Compensation Board
 - *Employment Standards Act*
 - *Occupational Health and Safety Guidelines*
 - Union Contracts (where applicable).

Product quality factors include:

- meeting job specifications
- consumer acceptance
- product appearance
- product presentation
- type and level of salesmanship
- after-sales service
- marketing strategies
- customer satisfaction.

Community Partnerships

Work standards infer accountability. Major goals of the community partnership component of each occupational course are to increase students' awareness of the standards used in the workplace and their ability to work to these standards. To assist the teacher to achieve these goals, invite community partners to:

- identify expected entry-level standards
- provide opportunities for students to practise these standards on the job
- participate in evaluating students' performance
- discuss the importance of maintaining standards and how and why standards may change over time.

(See *Teacher Resource Manual: Organizational Skills, "Work Standards"* for additional student activities.)

COMMUNICATION SKILLS

CONCEPTS

- Distinguishes between forms of communication:
 - verbal
 - non-verbal
 - symbolic.
- Gives examples of how good and poor communications affect interpersonal relations, performance and productivity.
- Explains why clarity and conciseness are required in workplace communications.

ATTITUDES

- Appreciates how different forms of communication impact on performance and productivity.
- Practises appropriate forms of communication in the workplace.
- Displays a responsible attitude toward asking and answering questions and following directions.
- Appreciates how communication can create positive and negative perceptions between the message sender and the message receiver.
- Displays a positive attitude toward self and the development of improved communication skills:
 - works independently, as well as effectively, with others in group situations
 - demonstrates/shares that which has been learned in group discussions, activities and independent studies
 - practises strategies for resolving interpersonal conflict
 - communicates personal successes/difficulties relative to tasks that are undertaken
 - demonstrates an attitude of interest/curiosity, taking risks and displaying perseverance in problem situations.

SKILLS

The skills related to **COMMUNICATION SKILLS** are outlined in the Learning Objectives in column one.

LEARNING OBJECTIVES

Related Life Skills

A. COMMUNICATION SKILLS

A.1 Identifies types of communication in local businesses/industries:

- verbal
- non-verbal
- symbolic.

A.2 Demonstrates ability to communicate effectively:

- verbal communication
- non-verbal communication.

Selects and uses the most effective form of communication in different situations; e.g.,

- at home
- at school
- in the workplace.

Verbal Communication

Asks and answers questions clearly and concisely.

Uses appropriate technical terms.

Is able to participate in a discussion:

- presents opinions
- permits and respects others' opinions
- shares information.

Demonstrates and describes a hobby activity to others.

Relates highlights of a recent holiday.

Uses "self-talk" to clarify tasks and to motivate performance.

Accepts and gives compliments.

Accepts and gives constructive feedback.

Non-verbal Communication

Uses body language to present the image of a person interested in the task and willing to learn:

- dresses appropriately
- looks eager
- stands or sits correctly—does not slouch
- comes to class/work on time
- completes assignments.

The reaction of others to the student will provide clear indications of whether individual students have employed socially and/or occupationally acceptable non-verbal communication behaviours.

Related Applications Across the Curriculum

Suggested Strategies/Activities

General

The teaching, learning and evaluation of communication skills is integrated into all subject areas in the Integrated Occupational Program.

Consistency in the reinforcement of acceptable verbal and non-verbal communications as an evaluative dimension across the curricula will tend to reinforce students' recognition of what is appropriate/inappropriate verbal and non-verbal communication.

CALM

Describing and developing effective communication skills is a major component of Theme 1, Self-Management, within the Career and Life Management course.

(See C. Bessert, et al., *Strategies for Career and Life Management*, Weigl Educational Publishers Limited, 1988.)

English

Each of the concepts, skills and attitudes addressed in English 36 may be appropriately applied and reinforced in each occupational course.

As in previous occupational courses, establish an atmosphere of trust, acceptance and support. Assure students that their questions are invited, and are taken seriously. Encourage students to:

- explain what they are doing and why
- participate in discussions
- contribute to class brainstorming activities
- ask questions of themselves and others; e.g.,
 - What's the problem?
 - Does this make sense?
 - Where did I go wrong?
 - What do you think of this?
 - How else can I do this?
 - Am I on the right track?
 - What do I do next?

Reinforce appropriate non-verbal behaviour; e.g.,

- appearance
- expressions
- stature.

Discuss the significance of keeping eye contact during a conversation, discussion, or when being given verbal instructions.

Have students:

- role play various non-verbal communications. Use a charade strategy and have the rest of the class identify and interpret the communication
- role play occupation-related scenes that involve both verbal and non-verbal communications
- discuss the effect of receiving a verbal communication that appears to conflict with the sender's non-verbal message
- brainstorm various ways to handle mixed messages.

Provide multiple opportunities for students to communicate with others and to ask and answer questions using complete sentences, and to use technical terms where appropriate:

- discussions
- brainstorming
- role play.

COURSE: OCCUPATIONAL COMPONENT (IOP Level 36)
COMMUNICATION SKILLS (3)

LEARNING OBJECTIVES

Related Life Skills

- A.1 Identifies types of communication in local businesses/industries. (continued)
- A.2 Demonstrates ability to communicate effectively. (continued)

Creates visual plans:

- drawings
- sketches
- flow charts.

Symbolic Communications

Recognizes common hand signals used in:

- sports activities
- traffic control.

Uses appropriate hand signals to communicate over the sound of machinery.

Reads, interprets and follows appropriate use and storage procedures indicated by symbols on equipment, tools and materials:

- hazardous goods
- poisons
- clothes
- appliances
- chemicals.

Related Applications Across the Curriculum

Suggested Strategies/Activities

English

Applies non-verbal communication skills appropriately in all situations; e.g.,

- facial expressions
- body position
- eye contact
- hand/arm gestures
- head movements.

Recognizes non-verbal messages sent by others.

Use small groups and have students formulate questions they would put on a unit exam in the course. Collect the questions and discuss them one by one:

- Why is it important to know that?
- Will answering this question show that you understand how to ... ?

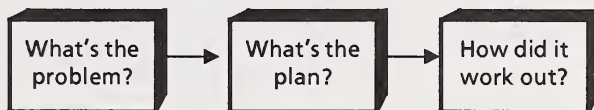
After discussing the pros and cons of each question, inform students that selected ones will actually be used on an upcoming test.

Have students discuss and compare techniques used to give and follow instructions:

- on a test
- in other courses
- during a field experience
- at home.

(See *Teacher Resource Manual: Suggested Teaching Strategies*, "SCORER: A Test-taking Strategy".)

Encourage students to use flow charts and other visuals when attempting to communicate information, solve problems, make decisions, etc. Use variations of the problem-solving/decision-making model.



(See *Teacher Resource Manual: Communication Skills* for additional student activities.)

Similarly, have students formulate questions related to an occupational procedure that may be asked of another:

- in writing
- orally
- pictorially
- a combination of all three.

LEARNING OBJECTIVES

Related Life Skills

A.3 Demonstrates effective interview strategies:

- appearance
- attitude
- communication skills.

Communicates effectively verbally.

Uses occupation related terms.

Uses appropriate-non-verbal communication:

- is well groomed
- dresses appropriately
- projects a positive attitude
- looks confident but not overconfident
- uses appropriate eye contact.

Related Applications Across the Curriculum

English

Reviews interview strategies developed in Theme D and applies skills and strategies in interview situations.

Suggested Strategies/Activities

Have students read: *The Easy-To-Read Career Planning Guide* (pp. 39–41).

Discuss the following topics:

- What is the purpose of an interview?
- Why would an employer interview me when he/she already has my application form and résumé?
- What are the "do's" and "don'ts" during an interview?
- Should I ask questions during an interview? What questions should I ask?
- How can I communicate that I want to work for this company?
- What should I do to prepare for the interview?
- What should I do if I can't answer a question or if I believe a question is inappropriate?

Community Partnerships

Have students role play being interviewed and evaluate their own and classmates' performances.

Invite community partners to:

- play the role of interviewers
- assist in evaluating students' performance in interview situations
- suggest ways to overcome nervousness before and during the interview.

(See *Teacher Resource Manual: Communication Skills* for additional student activities and resources related to effective interview strategies.)

COURSE: OCCUPATIONAL COMPONENT (IOP Level 36)
COMMUNICATION SKILLS (3)

LEARNING OBJECTIVES

Related Life Skills

A.4 Uses the telephone correctly.

Makes and cancels appointments.

Takes messages for another person.

Uses correct dialling codes.

Appreciates why a business telephone should not be used to make or receive personal calls, except in an emergency.

Related Applications Across the Curriculum

Suggested Strategies/Activities

English

Recognizes that clear verbal skills are essential to effective telephone communication.

Monitors:

- enunciation
- tone of voice
- volume
- focus on topic of discussion.

The use of the telephone for business purposes may continue to be an intimidating experience for some students. To help allay these fears, encourage students to review and use a variety of strategies to demonstrate correct use of the telephone in occupation-related contexts. Have students:

- role play a caller/a receiver
- write and present a job sheet on how to initiate and receive business calls. Encourage students to use flow charts and other visual aids to support the written instructions
- use appointment pads and/or books as appropriate
- identify types of related jobs in which telephone handling ability is important
- compare and contrast the differences between using a telephone for business and using one for personal calls.

Community Partnerships

Invite a community partner to describe and demonstrate the correct use of the business telephone. Contact may be made with:

- local telephone exchange store
- Alberta Government Telephones
- Edmonton Telephones
- switchboard operator in a local store
- receptionist.

Request a copy of written instructions used by a community partner to guide new employees' use of the business telephone.

READING SKILLS

CONCEPTS

- Understands the importance of being able to read and interpret literature effectively.
- Recognizes the diversity of occupation-related literature.
- Understands how to locate and access occupation-related literature.

ATTITUDES

- Appreciates how the ability to read and interpret information can impact on the job search and job attainment process and on career advancement opportunities.
- Appreciates how one's lifestyle can be affected by the ability to read and interpret literature.
- Appreciates that reading and interpretive ability can be improved through reading practice.
- Displays a positive attitude toward self and the development of improved reading abilities:
 - works independently, as well as effectively, with others in group situations
 - demonstrates/shares that which has been learned in group discussions, activities and independent studies
 - practises strategies for resolving interpersonal conflict
 - communicates personal successes/difficulties relative to tasks that are undertaken
 - demonstrates an attitude of interest/curiosity, taking risks and displaying perseverance in problem situations.

SKILLS

The skills related to **READING SKILLS** are outlined in the Learning Objectives in column one.

LEARNING OBJECTIVES

Related Life Skills

A. READING SKILLS

A.1 Reads and interprets occupation-related literature.

A.2 Reads related health and safety documents.

A.3 Reads terms of employment documents.

A.4 Uses resource centres:

- classroom/lab resources
- school and community libraries
- government agencies and publications
- business and industry resource centres and publications.

Reads and interprets:

- sports scenes and statistics
- product labels
- shop manuals
- instruction sheets
- information booklets
- television guides
- recipes.

Obtains correct parts replacements from a catalogue.

Orders supplies from a supply order sheet.

Reads temperatures, pressures; follows manufacturer's guides.

Adjusts machinery according to service manual.

Uses cleaning agents correctly.

Follows procedures for crop planting and animal feeding.

Adheres to written safety instructions.

Reads terms of employment.

Locates places on a map.

Uses:

- library indexes
- book indexes
- job sheets
- maps
- equipment and tools according to manufacturer's instructions.

Students reinforce these skills in:

- carrying out assignments in school, at home or in the workplace
- responding to job advertisements
- following manufacturer's instructions on equipment, tools and supplies
- completing tests, projects
- reading information sheets
- following job sheets
- accessing resources on loan from resource centres
- accessing free government publications.

Related Applications Across the Curriculum

Suggested Strategies/Activities

General

Each subject area has a body of literature specific to itself. The ability to read and interpret the literature is, therefore, a skill generic across the Integrated Occupational Program curricula.

The literature and the specialized vocabulary of an occupational course may, therefore, be reinforced by including their use in other subject areas.

Students are encouraged to access centres containing related resources and to follow written instructions in order to complete required and elective investigations, research and other projects.

English

Uses a variety of strategies to enhance reading comprehension in the workplace.

Establish, if necessary, and have students maintain, an in-class resource centre. When responding to a student's question about an item known to be written in a particular resource, have the student obtain the resource (if readily available) and find the answer to the question.

Have students select a topic/section from a data base, periodical or book and, using their own words, present the major points to the class. Encourage the combined use of verbal, written and graphic presentations. Where appropriate, encourage the use of computers.

Encourage students to compile an individual or group/class clippings book in which copies of related newspaper and magazine articles may be pasted and stored.

Ensure that students:

- become aware of the diversity of available resources, and use in-school and community resource centres
- read and follow *Occupational Health and Safety Regulations* (these should be posted in a clearly visible location and/or abbreviated copies of the documents should be provided to each student).

Community Partnerships

Arrange:

- for students to obtain or renew library cards, if necessary
- visits to libraries and other resource centres both in-school and in the community
- library orientations. Permit students time to browse through the variety of resource material
- on a biweekly or monthly basis, for the students to spend a block of time in a resource centre in order to obtain the most recent information relating to occupational areas:
 - technological changes
 - market trends
 - job opportunities.

(See *Teacher Resource Manual*: Introductory Skills for abbreviated resources related to occupational health and safety.)

COURSE: OCCUPATIONAL COMPONENT (IOP Level 36)
READING SKILLS (4)

LEARNING OBJECTIVES

Related Life Skills

A.5 Follows written instructions specific to the occupational area.

Uses a map.

Gives written directions.

Assembles a model, using a model kit.

Completes a jigsaw puzzle.

Performs simple repairs and installations following manufacturer's instructions.

A.6 Deals with conflicting instructions.

Asks for clarification when unsure of the meaning of a written instruction.

Consults with peers when dealing with conflicting instructions.

Writes a letter of inquiry to clarify the meaning of a set of instructions.

Related Applications Across the Curriculum

Suggested Strategies/Activities

General

In each subject area students are encouraged to interpret and follow written instructions.

Consistent reinforcement of the need to follow written or symbolic instructions will tend to enhance students' recognition of the importance of following instructions in school, at home and in the workplace.

English

Clarifies instructions using a variety of strategies, such as:

- re-reading
- asking supervisor, teacher specific questions
- discussing instructions with classmates, co-workers.

The methods used to give instructions may differ between occupations and workplaces, as well as in workplaces in which similar work is performed. Students must, therefore, learn how to adapt to the different methods of communicating instructions.

Reinforce the student behaviour of:

- asking for an instruction to be clarified, if it is not understood
- seeking clarification, if a written instruction and a subsequent verbal instruction appear to be in conflict.

Role play how to:

- ask the supervisor to clarify an instruction
- deal with conflicting instructions.

Have students:

- obtain a sheet of manufacturer's instructions for a related product or project
- read the instructions to the class
- interpret the instructions and repeat them in their own words.

(See *Teacher Resource Manual: Reading Skills* for additional student activities.)

WRITING SKILLS

CONCEPTS

- Explains the importance of being able to write legibly.
- Understands that writing ability is improved through practice.
- Uses acceptable forms and styles of writing:
 - sentences/paragraphs; e.g., letters of enquiry/thanks
 - point form; e.g., résumés, bills, work orders.

ATTITUDES

- Identifies how the ability to write legibly can impact on the job search process and on career development opportunities.
- Demonstrates a responsible attitude to writing:
 - uses complete sentences and paragraphs where appropriate
 - writes work orders, bills, receipts and reports legibly
 - takes inventory.
- Displays a positive attitude toward self and the development of improved writing skills:
 - works independently, as well as effectively, with others in group situations
 - demonstrates/shares that which has been learned in group discussions, activities and independent studies
 - practises strategies for resolving interpersonal conflict
 - communicates personal successes/difficulties relative to tasks that are undertaken
 - demonstrates an attitude of interest/curiosity, taking risks and displaying perseverance in problem situations.

SKILLS

The skills related to **WRITING SKILLS** are outlined in the Learning Objectives in column one.

LEARNING OBJECTIVES

Related Life Skills

A. WRITING SKILLS

- A.1 Writes in related paragraphs.
- A.2 Writes a résumé.
- A.3 Writes a job description.

Numerous life situations require students to develop the ability to use a clear, legible, yet personal style of penmanship, as well as the ability to use a keyboard or word processor.

These abilities must include being able to write in complete sentences and paragraphs.

A few examples of such life experiences are listed below:

- writing is important when presenting oneself in a job application or résumé
- the completion of job application forms seeking personal information requires a high degree of legibility, and often one or more paragraphs in which the writer presents himself/herself from a subjective perspective
- on the job, the student may be required to complete an accident report, a report on sales, etc.

Other related writing may include:

- letters to relatives/pan pals
- work orders
- bills
- receipts
- accident reports
- inventory lists.

Related Applications Across the Curriculum

General

Every subject area has a part to play in the development of legible handwriting and, where appropriate, keyboarding skills. Interstaff conferencing is recommended as a method of establishing minimum acceptable writing standards. These standards may relate to the correct use of words and sentence structure, as well as the legibility of the writing.

The appropriate use of computers in the writing process has the potential of returning to writing the role of shaping and refining ideas, producing text that can be read more easily, making writing easier, and motivating students to write.

The use of spell checkers, punctuation checkers and grammar checkers may similarly be used to enhance students' writing and help them develop, organize and express their ideas in written form.

English

Selects appropriate format according to the writing task.

Uses a computer software program to write and continuously update a résumé.

Suggested Strategies/Activities

Writing is often a neglected area of skill development in occupational courses. Requirements for writing complete and related sentences and paragraphs have tended to be replaced by point form response sheets and fill-in-the-box (or blank) tests. Rather than requiring written work only on tests, have students write a job description for one or more occupations. Indicate that you want them to respond to the following in sentence and paragraph form:

- why the occupation interests them
- what equipment, tools and supplies they will use on the job
- what opportunities exist for further education/training
- what their future career plans are.

Encourage students to use a variety of available technologies to complete written assignments.

Have students:

Prepare a Résumé

- think about the information they want to put in a résumé
- list the items in point form
- categorize the items; e.g.,
 - personal information
 - education
 - previous work experiences
- write a paragraph containing the items categorized under each heading.

Write a Job Description

Using information gained from school and community resources, describe in writing the tasks performed by workers in related occupations. Use appropriate paragraph and sentence structure to write:

- the technology of the occupation; e.g., equipment and tools used
- the materials handled
- the safety and sanitary practices that must be observed.

LEARNING OBJECTIVES

Related Life Skills

A.4 Submits job application forms.

Completes school related forms:

- registration
- course selection
- club/team membership.

Completes community activities-related forms:

- church membership
- library application
- youth group membership
- club/team membership.

Have students:

- discuss why it is important to present a neat, legible job application form or résumé to an employer
- using sample application forms from various related occupations, practise completing the form legibly
- brainstorm the advantages/disadvantages of submitting a handwritten as opposed to a word processed document
(See *Teacher Resource Manual: Introductory Skills, "Job Search Skills"* for sample job application forms and résumés.)
- practise writing a paragraph that can be used in response to a question often asked on a job application form; e.g., Why would you like to work for this company?.

Responses to this question should demonstrate the applicant's:

- knowledge of the company
- personal achievements
- hobbies, interests, volunteer work
- career goals.

Community Partnerships

Invite community partners to help make students aware of occasions in which the ability to write legibly and in complete sentences and paragraphs with and without the aid of a computer is an important part of the job.

In some occupational courses, writing skills may be further developed using a computer, word processor or typewriter.

(See *Teacher Resource Manual: Mathematical Skills* for additional student activities.)

MATHEMATICAL SKILLS

CONCEPTS

- Describes the use of mathematics in related occupational contexts.
- Describes why increasing computational competence is needed in both daily life and occupation-related activities.
- Recognizes that technology, in the form of computers and computerized systems, continues to influence the nature of the computational process and procedures commonly used in the workplace.

ATTITUDES

- Respects the fact that computational competence and problem-solving skills are needed in most occupations.
- Develops an increased sense of responsibility toward management of finances, inventory and other quantifiable materials.
- Appreciates the challenge involved in using different systems of measurement; e.g., imperial, metric, U.S.
- Displays a positive attitude toward self and the development of improved mathematical skills:
 - works independently, as well as effectively, with others in group situations
 - demonstrates/shares that which has been learned in group discussions, activities and independent studies
 - practises strategies for resolving interpersonal conflict
 - communicates personal successes/difficulties relative to tasks that are undertaken
 - demonstrates an attitude of interest/curiosity, taking risks and displaying perseverance in problem situations.

SKILLS

The skills related to **MATHEMATICAL SKILLS** are outlined in the Learning Objectives in column one.

LEARNING OBJECTIVES

Related Life Skills

A. MATHEMATICAL SKILLS

A.1 Uses SI metric units of measurement.

A.2 Uses imperial units of measurement.

Uses appropriate units of measurement;
e.g.,

AGRIBUSINESS

- Calculates yield
- Measures area

BUSINESS AND OFFICE OPERATIONS

- Orders supplies
- Applies postage and weight

CONSTRUCTION AND FABRICATION

- Cuts wood studs and panels
- Selects correct-sized tools

CREATIVE ARTS

- Mixes paints
- Cuts canvas

NATURAL RESOURCES

- Measures and records:
 - volume of gas
 - pressure of oil
 - temperature
 - quality of lumber

PERSONAL AND PUBLIC SERVICES

- Mixes formula
- Makes change
- Calculates sales

TOURISM AND HOSPITALITY

- Mixes cleaning chemicals
- Follows recipes

TRANSPORTATION

- Pumps gas
- Weighs cargo.

Related Applications Across the Curriculum

Suggested Strategies/Activities

General

Alberta Education uses the metric system. However, within the occupational component of the program, a number of occupational courses will continue to reflect the workplace usage of both metric and imperial measurements. In the areas of commercial food preparation and food services, workplace usage includes the metric, the imperial, and the U.S. systems of measurement.

Metric units of measurement and metric measurement tools should be used whenever possible. However, it should be recognized that students may have families, or part-time jobs, that do not use metric. In some instances, a combination of metric, imperial and U.S. measuring tools and units are used.

In cases where formulas, recipes, measurements require non-metric units, teachers should not teach conversion of non-metric quantities to metric quantities. Rather, they are encouraged to give advice and demonstrate to students the use of non-metric measuring tools.

Community Partnerships

Encourage students to observe and record the types of measuring tools and units used in the workplace.

Invite community partners to:

- describe their use of metric/imperial measurements and measuring tools
- discuss reasons for their use of one or both systems of measurement.

(See *Teacher Resource Manual: Mathematical Skills* for additional student activities and the resource *Metric Practice Guide for Teachers*, 1982.)

COURSE: OCCUPATIONAL COMPONENT (IOP Level 36)
MATHEMATICAL SKILLS (6)

LEARNING OBJECTIVES

Related Life Skills

A.3 Solves practical mathematical problems.

A.4 Applies ratio, proportion and per cent in occupational contexts.

Uses equivalent ratios in determining unit costs and multiple costs of consumer items. Evaluates calculations in determining "best buy".

Uses equivalent ratios in determining correct amount of ingredients in a recipe.

Applies concept of ratio to scale drawings. Estimates and calculates distances using the scale of a map.

Applies skills to travel situations, recognizing the relationship among travel rate, travel time and distance travelled. Uses equivalent ratios to solve related problems.

Recognizes the meaning of per cent discounts on consumer items; e.g., 10% discount means $\frac{1}{10}$ or 0.10 off the regular price.

Estimates and calculates money saved and the sale price of an article when given the per cent discount rate.

Related Applications Across the Curriculum

At the 36-level, Integrated Occupational Program students are not required to take mathematics. However, conferencing with teachers of mathematics, science and other subject areas will assist in identifying the skills needed and used by students across the curriculum. Where possible, local program planning should take responsibility for the development and reinforcement of mathematical skills across the curriculum. Such conferencing will also assist in establishing a meaningful context for the use of mathematics in other classes.

Suggested Strategies/Activities

Students may benefit from a review of previously developed concepts and skills. Diagnose areas of student strengths/weaknesses and assess enrichment/remedial activities as appropriate. Remedial activities may prove beneficial, if based on the use of meaningful concrete and visual representations.

Number relationships should be kept simple, and emphasis placed on concrete applications of mathematical concepts rather than on decontextualized computational exercises.

When students demonstrate their understanding of the mathematical processes, they should be encouraged to use the calculator in occupation-related applications and problem solving.

Emphasize the use of estimation in checking the results of computations. Mental arithmetic and estimation skills may be maintained and extended by providing opportunities for oral work:

- 25% of 100 mL
- 12 out of 60 = ____%
- a \$40 pair of jeans on sale at a 20% discount
- a 5% increase in the \$5 hourly wage.

COURSE: OCCUPATIONAL COMPONENT (IOP Level 36)
MATHEMATICAL SKILLS (6)

LEARNING OBJECTIVES

Related Life Skills

A.5 Calculates hourly, weekly and monthly income.

A.6 Calculates costs, sales, profits.

Applies appropriate problem-solving strategies to situations that require the routine use of mathematical concepts and skills:

- examines and evaluates "best-buys"
- calculates cost of loans
- maintains a weekly/monthly budget.

Estimates and calculates appropriate gratuities to be paid for service.

Recognizes that not all money taken in by a business is profit.

Appreciates the cost of doing business by taking bank loans and paying interest charges.

Checks and verifies:

- savings deposit records
- information on a bill/receipt
- record of earnings.

Related Applications Across the Curriculum

Suggested Strategies/Activities

General

The use of appropriate strategies for problem solving is emphasized across the curriculum. A problem-solving model, similar to the one used in the occupational courses, is used in all courses within the Integrated Occupational Program and frequently applied in the workplace.

Have students:

- keep a daily record of customer sales/service
- calculate cost of supplies used to provide customer goods and services
- calculate appropriate percentage markups/profit margins/profits
- calculate what they would earn if they were paid by different systems; e.g.,
 - basic minimum wage plus 6% commission on all sales
 - solely on commission; e.g., 10%
 - a wage of \$250 per week
 - \$6 per hour.

Encourage students to use skills of estimation to:

- determine whether a solution in problem solving is reasonable
- check the reasonableness of computational results when using a calculator or paper and pencil.

Encourage students to develop the habit of always asking themselves; "Is my best answer reasonable?"

Community Partnerships

Invite local business operators to discuss the use of accounting and inventory control technology in the workplace.

Interview local employers to determine:

- alternative methods of paying wages
- commission rates in sales-related occupations
- costs of operating a small business.

COURSE: OCCUPATIONAL COMPONENT (IOP Level 36)
MATHEMATICAL SKILLS (6)

LEARNING OBJECTIVES

Related Life Skills

A.7 Handles cash, cheques and credit transactions.

Uses the services provided by a bank, credit union, etc.

Changes large denomination bills for smaller bills.

Checks bills, receipts and change when shopping.

Some of the occupational courses; e.g., hair care, esthetology, commercial food preparation, business services, may include customer service activities involving the handling of money.

Establish a procedure for handling cash, cheques and credit transactions and ensure that each student is aware of the responsibilities involved when accounting for the sale of goods and services. The *Teacher Resource Manual: Mathematical Skills* outlines procedures that might be used when students handle payments.

Job sheets related to the handling of cash, cheques and credit transactions are contained in the *Business Services 36 Student Workbook*. These job sheets may be used, where appropriate, in other occupational courses.

Community Partnerships

Have students observe payment handling procedures in local businesses; interview operations of local businesses as to their policies and procedures for:

- accepting cheques
- making change
- verifying a credit card
- handling foreign currency.

Where appropriate, students can be prepared to handle cashier and related responsibilities by:

1. job shadowing a cashier/receptionist
2. working under the close supervision of a trained cashier/receptionist
3. being given increasing levels of responsibility.

VISUAL SKILLS

CONCEPTS

- Relates different signs and symbols to appropriate businesses and industries.
- Recognizes signs and symbols that relate to occupational health and safety.
- Distinguishes between and interprets charts and graphs.

ATTITUDES

- Appreciates the value of having an international system of signs and symbols.
- Appreciates the value of critical and creative thinking skills in developing and interpreting charts and graphs.
- Displays a positive attitude toward self and the development of improved visual skills:
 - works independently, as well as effectively, with others in group situations
 - demonstrates/shares that which has been learned in group discussions, activities and independent studies
 - practises strategies for resolving interpersonal conflict
 - communicates personal successes/difficulties relative to tasks that are undertaken
 - demonstrates an attitude of interest/curiosity, taking risks and displaying perseverance in problem situations.

SKILLS

The skills related to **VISUAL SKILLS** are outlined in the Learning Objectives in column one.

LEARNING OBJECTIVES

Related Life Skills

A. VISUAL SKILLS

A.1 Responds appropriately to occupation-related signs and symbols:

Pictorial
Road signs
Fabric care
Safety

Numeric
Mathematics
Science

Alphabetic
Fire extinguishers
Chemicals

Combination
Hazardous products
Road signs

A.2 Constructs a chart or graph related to an occupational area.

Seeing, interpreting and reacting to symbols may be critical in many areas of daily life:

- obeying non-smoking signs
- obeying road signs
- reacting to traffic signals
- recognizing poisons
- handling hazardous materials.

Recognizes that tables and charts may also be used to provide directions/sequences for activities:

- job sheets
- assembly instructions
- recipe ingredients.

Interprets information displayed in tables, charts and graphs obtained locally (newspapers, magazines, community businesses and institutions). Examples include:

- television guides
- height/weight relationships
- long distance telephone rates
- highway distance charts
- postal rates
- travel schedules (plane, bus, train)
- income and expenses
- budget plans/summaries
- metric-imperial conversion charts
- wage deductions
- income tax tables
- interest tables.

Related Applications Across the Curriculum

Suggested Strategies/Activities

General

Students are generally expected to be able to read and interpret subject-related signs and symbols including maps, transportation schedules, shipping labels, material labels and mathematical signs and symbols. Each subject area introduces students to a number of symbols unique to that subject area.

English

Enhances viewing skills using Theme C: Media Trends. Critically analyzes visual materials to enhance understanding.

Uses visuals to enhance understanding of written material.

Review the signs and symbols introduced in previous courses. Some of these are included in the *Teacher Resource Manual: Introductory Skills, "Safety"*.

Ensure that students are able to identify and respond correctly to signs and symbols commonly found in the school and in the workplace; e.g., WHMIS, clothing symbols.

Stress that the ability to interpret signs and symbols is important in the workplace. Failure to obey posted signs can cause serious accidents.

Encourage students to construct a chart or graph to communicate data and ideas; e.g.,

- use the basic problem-solving/decision-making model as a framework to guide their thinking and task procedures
- use a flow chart to show the number and sequence of steps in a procedure
- use a bar graph to record attendance, achievement score
- use a pie graph to indicate the percentage of jobs available within each occupation within an occupational cluster.

Further examples of the various uses of different types of charts and graphs are addressed in the Visual Skills Unit of the *Teacher Resource Manual*.

COURSE: OCCUPATIONAL COMPONENT (IOP Level 36)
VISUAL SKILLS (7)

LEARNING OBJECTIVES

Related Life Skills

E

A.3 Creates an occupation-related design or product.

Reflects on past and present creative and leadership initiatives; e.g.,

- model building
- cooking, baking
- church and community group activities
- craftwork and artwork
- child care/baby-sitting
- scouting/guiding.

Uses problem-solving/decision-making strategies to plan creative/leadership initiatives; e.g.,

- sketches a visualization of an end product
- consults with others before obtaining and using others' resources
- considers the safety and well-being of others in a work area.

E = Elective Component

Related Applications Across the Curriculum

Suggested Strategies/Activities

General

In the Integrated Occupational Program, encouragement and reinforcement of each student's demonstrated creativity and leadership abilities and potential abilities is an integrated approach taken across the curricula.

Students may need to communicate their ideas with teachers from a variety of subject areas and with one or more person(s) in the community. This type of integrated learning should be encouraged.

English

Creates an advertising campaign using materials and activities in Theme C: Media Trends.

This unit may be used to enrich/remediate the learning experience of individual students.

Students who initiated and developed their own projects at Level 26 may consider:

- refining the procedure used previously
- planning to upgrade the quality of the previous project
- decreasing the time previously taken to complete the project
- rethinking the total project.

Project work, which requires the student to demonstrate a broad range of initiatives, knowledge and skills, is a useful enrichment activity. Teacher guidance, however, is essential to these activities to ensure that the project:

- is within students' known potential ability level
- will provide beneficial learning experiences
- will provide opportunities for the students to experience success.

Students undertaking this type of self-directed activity for the first time should be encouraged to develop a plan before proceeding; e.g.,

- consider ideas for the project
- gather pertinent information
- consider the alternatives
- select a project
- outline/sketch the design of the project
- identify the steps in the procedure
- sequence the steps
- gather required materials
- implement the plan
- evaluate the completed project.

COURSE: OCCUPATIONAL COMPONENT (IOP Level 36)
VISUAL SKILLS (7)

LEARNING OBJECTIVES

Related Life Skills

- E A.3 Creates an occupation-related design or product. (continued)

Students may also be encouraged to seek advice, assistance, or the services of a mentor, from among other members of the school's staff or members of the community.

As an elective component, students who demonstrate interest and motivation may work on individual or group projects that relate to other courses. These creative projects may focus on activities related to the curriculum, the co-curriculum or the community:

AGRIBUSINESS

- volunteering to repair basic farm equipment
- preparing a floral display for a school function
- initiating a beekeeping operation.

BUSINESS AND OFFICE OPERATIONS

- starting/operating a school store
- creating school window and showcase displays
- volunteering to work at/promote community events.

CONSTRUCTION AND FABRICATION

- offering basic home repairs to those in need
- drafting the design for a school or community project.

CREATIVE ARTS

- designing posters to promote an event
- writing signs for the school
- designing/producing the school's information booklet/yearbook.

NATURAL RESOURCES

- surveying local mining, oil and gas and/or forestry projects
- participating in forestry activities; e.g., firefighting.

COURSE: OCCUPATIONAL COMPONENT (IOP Level 36)
VISUAL SKILLS (7)

LEARNING OBJECTIVES

Related Life Skills

- E A.3 Creates an occupation-related design or product. (continued)

PERSONAL AND PUBLIC SERVICES

- initiating or participating in a volunteer child care centre
- providing hair and esthetology services to local shut-ins and hospitalized patients
- initiating a spring/fall clean-up project for the school/community.

TOURISM AND HOSPITALITY

- preparing a meal to say "thank you" to community partners
- setting covers and serving a meal for parents and other community partners
- wash/clean/repair the uniforms of a school team.

TRANSPORTATION

- setting up a new inventory control system for the lab
- organizing a car wash to raise money for a school event or a charity
- surveying the number of cars that use and purchase goods from a local service station.

ENTREPRENEURSHIP

CONCEPTS

- Outlines how personal interests and skills may be related to entrepreneurial opportunities.
- Identifies common characteristics of small businesses, and recognizes the advantages and disadvantages of small business ownership.
- Recognizes entrepreneurship as both a career option and advancement on a potential career ladder.
- Understands the meaning of "enterprise" and "risk taking".

ATTITUDES

- Appreciates the present roles played by entrepreneurs in society, and predicts the future for course-related enterprises.
- Develops a realistic attitude toward enterprise that recognizes the importance of organization, planning and risk taking.
- Displays a positive attitude toward self and the development of entrepreneurial awareness:
 - works independently, as well as effectively, with others in group situations
 - demonstrates/shares that which has been learned in group discussions, activities and independent studies
 - practises strategies for resolving interpersonal conflict
 - communicates personal successes/difficulties relative to tasks that are undertaken
 - demonstrates an attitude of interest/curiosity, taking risks and displaying perseverance in problem situations.

SKILLS

The skills related to **ENTREPRENEURSHIP** are outlined in the Learning Objectives in column one.

LEARNING OBJECTIVES

Related Life Skills

A. ENTREPRENEURIAL AWARENESS

A.1 Identifies local entrepreneurs.

A.2 Identifies traits of entrepreneurs.

Relates hobbies, sports, and other curricular and co-curricular interests to potential entrepreneurial activities; e.g.,

- baking
- camping
- child care
- cooking
- drawing
- driving
- gardening
- hair care
- hydroponics
- landscaping
- metal work
- model building
- modelling
- painting
- photographs
- sewing
- sports
- woodwork
- volunteering.

Maintains a record of past and present part-time employment activities:

- wages earned
- risks taken/trade-offs
- advantages/disadvantages
- likes/dislikes.

Related Applications Across the Curriculum

Suggested Strategies/Activities

English

Uses a variety of methods to gather information about entrepreneurial endeavours in the community; e.g.,

- perusing newspapers, magazines
- interviewing and surveying self-employed individuals.

Review the concepts of "entrepreneurship" and "entrepreneur".

Advise students that they may have the potential to be entrepreneurs. There are strong indicators that students can accept the challenge of promoting themselves and their skills in the marketplace.

Some students may not be able to relate well to others in occupations where teamwork is a major requirement. However, these and other students may have the potential to:

- develop saleable skills, projects and processes
- develop entrepreneurial skills.

Teachers should not overlook this dimension of each student's potential, and should attempt to build on this whenever a student demonstrates that he or she has the potential to become an entrepreneur.

Individual, elective projects involving students may be initiated by a student, a teacher, a community member or a combination of all three.

Community Partnerships

Obtain and have students read literature related to entrepreneurship from government and community agencies; e.g.,

- Alberta Career Development and Employment
- The Canadian Foundation for Economic Development
- Junior Achievement
- YWCA/YMCA.

Have students:

- use the local business directories and their observational skills to:
 - identify local small businesses; e.g., type of operations, number of employees, hours of operation
- interview operators of local small businesses and record their responses; e.g.,
 - When and why did you become an entrepreneur?
 - Who can become an entrepreneur?
 - Are there different kinds of entrepreneurs?
 - What traits (knowledge, skills, attitudes) are common to most entrepreneurs?

COURSE: OCCUPATIONAL COMPONENT (IOP Level 36)
ENTREPRENEURSHIP (8)

LEARNING OBJECTIVES

Related Life Skills

A.1 Identifies local entrepreneurs. (continued)

A.2 Identifies traits of entrepreneurs.
(continued)

A.3 Identifies steps necessary to start a small
business.

E A.4 Initiates a small business.

Participates in community fund raising
activities:

- canvasses on behalf of a charity
- organizes the collection and sale of
used goods
- helps at a bake sale.

Relates personal abilities to potential
entrepreneurial opportunities.

Recognizes that not all income received in
business is profit.

Appreciates the need for appropriate
licensing and proper records management
in business.

(See *Teacher Resource Manual: Entrepreneurship* for sample interview guide.)

- assess their own traits and their potential to become entrepreneurs.

Invite consultants from Junior Achievement and other community agencies that promote enterprise, innovation and entrepreneurship, to enrich students' learning experiences.

Occupational courses using customer services as an instructional component provide excellent opportunities to introduce students to basic sales and marketing techniques and to reinforce the importance of good human relations skills for those students especially interested in careers in the service industries.

Regular brainstorming sessions by students may be directed toward identifying customer service activities and other enterprising and innovative activities not previously considered or used.

(See *Teacher Resource Manual: Entrepreneurship* for additional student activities and suggested contacts for Junior Achievement consultants.)

FIELD EXPERIENCES

CONCEPTS

- Describes the relationship between school and community learning activities.
- Distinguishes between job and career potentials in the community.
- Predicts factors that may affect job attainment, retention and career advancement.

ATTITUDES

- Appreciates the value of on-the-job learning and training.
- Demonstrates appreciation for ongoing learning opportunities provided by community partners.
- Displays an attitude of respect and helpfulness that may translate into providing volunteer services to individuals or agencies in need.
- Displays a positive attitude toward self and the development of knowledge, skills and attitudes related to career goals:
 - works independently, as well as effectively, with others in group situations
 - demonstrates/shares that which has been learned in group discussions, activities and independent studies
 - practises strategies for resolving interpersonal conflict
 - communicates personal successes/difficulties relative to tasks that are undertaken
 - demonstrates an attitude of interest/curiosity, taking risks and displaying perseverance in problem situations.

SKILLS

The skills related to **FIELD EXPERIENCES** are outlined in the Learning Objectives in column one.

LEARNING OBJECTIVES

Related Life Skills

A. FIELD EXPERIENCES

- A.1 Prepares for employment through community partnership activities.
- A.2 Demonstrates appropriate work habits.
- A.3 Demonstrates effective human relations techniques in the workplace.
- A.4 Practises safety in the workplace.
- A.5 Demonstrates acceptable verbal and non-verbal communication skills.
- A.6 Practises personal and public hygiene procedures.
- A.7 Demonstrates entry-level competency in the use of equipment and tools.
- A.8 Uses supplies correctly.
- A.9 Follows good storage practices.
- A.10 Demonstrates pride in work.
- A.11 Demonstrates willingness to work.
- A.12 Demonstrates respect for others.
- A.13 Follows accepted principles and procedures.
- A.14 Recognizes opportunities for further education/training.

Shows willingness to learn and participate:

- asks questions
- answers questions
- follows instructions.

Works well with others.

Respects the rights, opinions and property of others.

Observes occupational health and safety practices.

Maintains a positive attitude toward self, work and career goals.

Appreciates that all employment/volunteer activities contribute to:

- personal achievement and growth
- network of contacts and potential references.

Related Applications Across the Curriculum

General

Field experiences are an integral part of community partnerships in the Integrated Occupational Program. They may be developed and used in many forms. Some of these forms have been suggested in the adjacent column and in previous units of instruction.

Teachers are encouraged to maximize their personal contacts with businesses and industries in the community. This personal contact facilitates the availability of community members to act as guest speakers, demonstrators, job-shadow role models, field trip contacts, among others.

Suggested Strategies/Activities

Community partnerships are based on the belief that educators can enhance students' learning experiences by bringing the community into the school and by taking the students out into the community.

The *Integrated Occupational Program Information Manual for Administrators, Counsellors and Teachers* provides further details about community partnerships, including field experiences:

- mandate
- benefits to students, teachers, schools, business and industry, the community
- types of community partnerships
- recommended time allocations by grade
- how to launch successful partnerships
- partnership program initiation and planning
- partnership program implementation
- partnership program evaluation
- recognizing community partners.

For some students, this may be their final year in high school. Therefore, field experiences and other community partnership activities provide opportunities for them to initiate and foster relationships with community partners that may lead to offers of employment.

Students participating in field experience projects of either long or short duration may be evaluated using the sample "Field Experience Evaluation Form" found in the Entrepreneurship section of the *Teacher Resource Manual*.

Encourage students to evaluate themselves during and after each field experience. Ask them to record their observations and feelings about what they learned from the experience and how the learning situation might have been improved.

Invite students to suggest field experience activities, and, where appropriate, have each student:

- present a written and/or verbal proposal to the class for discussion
- work with the teacher to plan and organize an approved field experience
- initiate contact with the community partner
- thank the community partner after the field experience.

WORK SKILLS

CONCEPTS

- Displays an improved understanding of occupation-related:
 - equipment, tools and supplies
 - safe and sanitary practices
 - standards of performance and productivity.
- Displays a sense of pride in performance, task completion and achievement.

ATTITUDES

- Appreciates the value and transferability of generic skills and work skills.
- Displays a positive attitude toward self, career goals and the world of work:
 - works independently, as well as effectively, with others in group situations
 - demonstrates/shares that which has been learned in group discussions, activities and independent study
 - practises strategies for resolving interpersonal conflict
 - communicates personal successes/difficulties relative to tasks that are undertaken
 - demonstrates an attitude of interest/curiosity, taking risks and displaying perseverance in problem situations.

SKILLS

The skills related to **WORK SKILLS** are outlined in the Learning Objectives in column one.

COURSE: OCCUPATIONAL COMPONENT (IOP Level 36)
WORK SKILLS (10)

LEARNING OBJECTIVES

Related Life Skills

The work skills identified in this section of the program of studies/curriculum guide are generic to each of the courses that comprise the occupational component of the Integrated Occupational Program. A work skills profile specific to each Level 36 occupational course is provided in the student workbook available for each occupational course. In addition, a scope and sequence chart of the work skills for each occupational course, Levels 16–36, is provided herein.

Life skills are addressed in each of the following occupational clusters and related occupational courses.

AGRIBUSINESS

- Agricultural Mechanics
- Agricultural Production
- Horticulture Services

BUSINESS AND OFFICE OPERATIONS

- Business Services
- Office Services

CONSTRUCTION AND FABRICATION

- Building Services
- Construction Services

CREATIVE ARTS

- Crafts and Arts
- Technical Arts

NATURAL RESOURCES

- Natural Resource Services

PERSONAL AND PUBLIC SERVICES

- Child and Health Care Services
- Esthetology
- Fashion and Fabric Services
- Hair Care

TOURISM AND HOSPITALITY

- Commercial Food Preparation
- Food Services
- Maintenance and Hospitality Services

TRANSPORTATION

- Automotive Services
- Service Station Services
- Warehouse Services

Related Applications Across the Curriculum

Suggested Strategies/Activities

General

Teachers are encouraged to liaise with colleagues and community members in order to maximize the potential for integrating the resources of the school and its community.

Whenever possible, the core skills; e.g., reading, writing, viewing, speaking, computing, problem solving/decision making should be related to real-life applications, including the contexts provided in each occupational course.

The required (generic) learning objectives shown in column one of this unit are designed to be taught in the context of each occupational course.

Suggested learning objectives specific to each occupational course are outlined in this document (scope and sequence charts, pp. 175 to 316).

Suggested teaching/learning strategies and other support materials are contained in the *Teacher Resource Manual*.

Teachers are encouraged to:

- use the contents of the Level 16 and Level 26 student workbooks as teaching aids:
 - review and reinforce both the generic skills and the work skills
 - assess students' competencies; e.g., job sheets, evaluation charts
- supplement and complement the material contained in the workbooks with additional learning activities that best meet the needs, interests and ability levels of their students.

LEARNING OBJECTIVES

Related Life Skills

A. IDENTIFICATION

A.1 Selects a career path.

Makes informed decisions; e.g.,

- selects a school
- selects a program and courses that will maximize potential
- chooses friends
- appreciates the importance of the environment.

Keeps current his or her awareness of businesses and industries in the community. Maintains a network of informed contacts by discussing job scope and job opportunities in related occupations:

- family members
- friends
- workers
- supervisors
- employers.

Community Partnerships

Community partnerships are an integral component in the teaching and learning of work skills related to each occupational course.

Partnership activities might include:

- in-school activities using community newspapers, newsletters:
 - guest speakers
 - guest demonstrators
 - guest project evaluators
 - community and parent visitations
 - customer services
- field experience activities:
 - job shadowing
 - field trips
 - interviews
 - surveys
 - volunteerism
 - part-time jobs
 - community work
 - work study.

Review material covered in the Level 16 and Level 26 occupational courses and have students identify and record changes in local and regional job opportunities.

Have students update and maintain their logbook of potential employers:

- name of company/business
- owner/manager(s)
- type of work performed
- work conditions
- wage rate
- other information.

Encourage students to assemble information on careers of interest, and to:

- discuss alternative career paths within the occupational cluster
- consider career paths that may be accessed outside of the occupational cluster
- clearly identify, assess and record their abilities, interests and experience in the form of a résumé

COURSE: OCCUPATIONAL COMPONENT (IOP Level 36)
WORK SKILLS (10)

LEARNING OBJECTIVES

Related Life Skills

A.2 Recognizes equipment, tools and supplies.

Selects the proper tools for the job.

Related Applications Across the Curriculum

Suggested Strategies/Activities

- consider the potential for career advancement within related and alternative career paths and the further education/training that might be required
- select a career path, using guided problem-solving/decision-making strategies
- recognize that their career path might change over time.

Discuss:

- How many people do you know who have been employed in the same occupation for 5 years? For 10 years? For 20 years?
- Why do people change occupations/careers?
- What effect might technological change have on career choice?
- What can employees/employers do to remain in business in a competitive marketplace?

Community Partnerships

A significant portion of each Level 36 occupational course should be devoted to community partnership activities. A minimum of 40% of the instructional time is recommended.

Encourage students to:

- introduce themselves to employers through:
 - field experiences
 - in-school visits
 - student-initiated contacts
- consider the career alternative of becoming an entrepreneur
- network, by telling people they know that they are interested in a job/career in _____
- use the local newspaper and trade/business magazines to identify career paths and job/career opportunities
- demonstrate to employers that they possess the abilities that would enhance an employer's business.

By the start of the Level 36 course, most students should have developed the ability to recognize the basic equipment, tools and supplies commonly used in related occupations. A review of the major items should confirm this. The 16- and 26-level student workbooks can be used to review and reinforce this objective.

LEARNING OBJECTIVES

Related Life Skills

B. EQUIPMENT, TOOLS AND SUPPLY USAGE

B.1 Uses equipment, tools and supplies correctly:

- selects appropriate materials for the job
- follows safe and sanitary practices.

Related Applications Across the Curriculum

Suggested Strategies/Activities

General

Work standards and process skills are emphasized in all subject areas.

Teacher conferencing will enable teachers in all disciplines to establish similar expectations for the various aspects of students' performance and attitudes.

The decision-making model:

Input → Process → Output

may be used to guide the instructional process.

English

Enhances personal vocabulary to read and understand instructions, safety standards, etc., at the workplace.

Community Partnerships

Invite community partners to:

- keep students updated on new equipment, tools and supply items introduced into their business/industry
- demonstrate the new technology
- reinforce the importance of knowing "what to use" and "when to use it" in the workplace.

Students will have been introduced to correct handling of a variety of tools in their Level 16 occupational courses. Safe use of hand, power and measuring tools may have been covered in two or more courses. However, correct equipment, tool and supply handling practices need to be constantly reinforced, not as discrete skills but as the means by which a product can be completed most effectively and efficiently.

Because students learn at different rates, teachers are encouraged to be flexible in their unit and lesson planning, especially in lessons that deal with equipment, tools and supply description and safe use. Where students demonstrate satisfactory* levels of knowledge and skill in these areas, enrichment activities can be provided in related areas through:

- teacher-directed projects
- self-directed projects
- community activities
- volunteer work.

*Indicators of satisfactory levels of skill development are addressed in the *Teacher Resource Manual: Work Skills*.

LEARNING OBJECTIVES

Related Life Skills

C. WORK STANDARDS

C.1 Works to accepted standards:

- attends regularly
- follows instructions
- completes work on time
- works cooperatively
- shows willingness to learn.

D. SUPPLY MANAGEMENT

D.1 Manages supplies efficiently:

- uses supply items for correct purposes
- conserves supplies
- returns unused supplies to correct storage areas.

E. WORK AREA MANAGEMENT

E.1 Maintains a professional work area:

- cleans up
- replaces tools in correct storage locations
- discards wastes properly
- leaves work area ready for next user.

All workers are expected to perform to generally accepted standards. Students, as workers or potential workers, should be made aware very early in the instructional process what standards of performance are expected at the 36-level of each occupational course. Performance criteria may include a monthly checklist that evaluates:

- attendance
- punctuality
- area of interest
- ability to work with others
- responsibility
- attentiveness in class
- community involvement.

In addition, job-specific information and job sheets should clearly state details of both the process to be followed and the expected service or product outcome. Both the process skills and the final service or product can be evaluated by using peer evaluations, self-evaluations and checklists, as well as teacher evaluations.

Students who successfully complete a minimum of 80 credits in the specified core, occupational and other complementary course will be eligible to receive a Certificate of Achievement.

OCCUPATIONAL COMPONENT COURSES: SCOPE AND SEQUENCE CHARTS

The following scope and sequence charts identify the required contexts for instruction and the suggested work skills in each IOP occupational course. The majority of the work skills are developmental through Levels 16, 26 and 36.

THE JOURNAL OF THE
ROYAL ANTHROPOLOGICAL INSTITUTE

INTEGRATED OCCUPATIONAL PROGRAM

OCCUPATIONAL COMPONENT

SCOPE AND SEQUENCE

Occupational Cluster: Agribusiness

Occupational Course: **AGRICULTURAL MECHANICS**

Course Sequence: Agricultural Mechanics 16–26–36

- Notes:**
1. Level 16 focuses on identification and introduction of skills including rope work, woodworking, metalwork and oxyacetylene welding.
 2. Level 26 focuses on blueprint reading, arc welding and small engine tasks.
 3. Level 36 focuses on forge work, soldering, concrete work and electrical installation work.
 4. Students indicating an interest in agriculture should be encouraged to consider taking the Agricultural Production and Horticultural Services sequences.

GENERAL OBJECTIVES

1. To develop students' personal and interpersonal skills.
2. To develop students' awareness of opportunities and working conditions in agricultural mechanics industry.
3. To develop students' knowledge and skills of basic mechanics in agriculture.
4. To enable students to obtain employment in a related occupation and/or to articulate with another secondary program or post-secondary institution for further training.

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10. WORK SKILLS			
10.1 Identification			
10.1.1 Job Scope	10.1.1 Job Scope (a) Identifies the basic skills used in agricultural mechanics: • carpentry • metalwork • oxyacetylene welding and cutting	10.1.1 Job Scope (a) Describes the basic skills used in agricultural mechanics: • carpentry • metalwork • oxyacetylene welding and cutting	10.1.1 Job Scope (a) Describes the relationship among: • operation • maintenance • repair • storage • safety
10.1.2 Equipment, Tools and Supplies	10.1.2 Equipment, Tools and Supplies (a) Identifies major equipment, tools and supplies used in basic: • carpentry • metalwork • welding • rope work	10.1.2 Equipment, Tools and Supplies (a) Identifies major items of farm machinery (b) Identifies small engines used on farm machinery	10.1.2 Equipment, Tools and Supplies (a) Identifies major items of equipment on a farm (b) Identifies types of tools used on a farm (c) Identifies types of supplies used in agricultural mechanics

Level 16			Level 26			Level 36		
10.2	Equipment, Tools and Supplies Usage	10.2	Equipment, Tools and Supplies Usage	10.2	Equipment, Tools and Supplies Usage	10.2	Equipment, Tools and Supplies Usage	
10.2.1	<u>Blueprint Reading</u>	10.2.1	<u>Blueprint Reading</u> (a) Identifies types of drawings (b) Identifies drawing features	10.2.1	<u>Blueprint Reading</u> (a) Identifies the purpose of blueprints (b) Reads blueprints (c) Drafts (sketches, draws) a small farm tool project (d) Constructs a project	10.2.1	<u>Blueprint Reading</u> (a) Reads basic blueprints	
10.2.2	<u>Rope Work</u>	10.2.2	<u>Rope Work</u> (a) Performs rope work related to agriculture: • identifies types of rope • identifies uses of rope • ties knots • shortens ropes • splices ropes (b) Evaluates rope work (c) Identifies safe use practices	10.2.2	<u>Rope Work</u> (a) Reviews Level 16 unit (b) Identifies the use of ropes in agriculture-related activities (c) Demonstrates safe use practices	10.2.2	<u>Rope Work</u> (a) Demonstrates entry-level ability rope work skills (b) Uses ropes in agriculture-related activities (c) Demonstrates safe use practices	
10.2.3	<u>Farm Metalwork</u>	10.2.3	<u>Farm Metalwork</u> (a) Constructs an agriculture-related project out of metal: • selects metals • lays out • cuts • bends • sharpens hand tools (b) Identifies safe use practices	10.2.3	<u>Farm Metalwork</u> (a) Uses metalwork skills to construct an agriculture-related project (b) Demonstrates safe use practices	10.2.3	<u>Farm Metalwork</u> (a) Demonstrates entry-level farm metalwork skills (b) Demonstrates safe use practices (c) Evaluates completed work	
10.2.4	<u>Forge Work</u>	10.2.4	<u>Forge Work</u>	10.2.4	<u>Forge Work</u>	10.2.4	<u>Forge Work</u> (a) Demonstrates safe use practices (b) Sets up and shuts down a gas furnace (c) Cuts metal (d) Bends metal (e) Uses drawing and molding techniques (f) Evaluates completed project	

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10.2.5 <u>Soldering</u>	10.2.5 <u>Soldering</u>	10.2.5 <u>Soldering</u> (a) Observes soldering operations	10.2.5 <u>Soldering</u> (a) Demonstrates the safe use of soldering equipment, tools and supplies (b) Solders seams, joints and wires (c) Evaluates completed work
10.2.6 <u>Oxyacetylene Welding and Cutting</u>	10.2.6 <u>Oxyacetylene Welding and Cutting</u> (a) Demonstrates the safe use of oxyacetylene equipment to perform: • braze welding • fusion welding • cutting (b) Evaluates completed weld (c) Identifies safe use practices	10.2.6 <u>Oxyacetylene Welding and Cutting</u> (a) Reviews Level 16 unit (b) Uses welding skills in the production of an agriculture-related project (c) Demonstrates safe use practices	10.2.6 <u>Oxyacetylene Welding and Cutting</u> (a) Demonstrates entry-level welding skills (b) Demonstrates safe use practices (c) Evaluates completed work
10.2.7 <u>Arc Welding and Gouging</u>	10.2.7 <u>Arc Welding and Gouging</u>	10.2.7 <u>Arc Welding and Gouging</u> (a) Demonstrates the safe use of arc welding equipment and supplies: • sets up, operates, shuts down • strikes an arc and runs a bead • cuts • fillet welds: flat, horizontal • welds cast iron (b) Evaluates arc welds	10.2.7 <u>Arc Welding and Gouging</u> (a) Demonstrates entry-level arc welding skills (b) Demonstrates safe use practices (c) Evaluates completed work
10.2.8 <u>Small Engines</u>	10.2.8 <u>Small Engines</u>	10.2.8 <u>Small Engines</u> (a) Describes the use of small engines in agriculture, and demonstrates: • operating procedures • preventive maintenance • storage procedures	10.2.8 <u>Small Engines</u> (a) Demonstrates entry-level ability to operate small engines

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
		(b) Evaluates projects	(b) Demonstrates entry-level ability to perform basic maintenance operations (c) Stores engines correctly (d) Demonstrates safe use practices
10.2.9 <u>Farm Carpentry</u>	10.2.9 <u>Farm Carpentry</u> (a) Constructs an agriculture-related project out of wood: • plans project • selects materials • lays out project materials • constructs project • evaluates completed project	10.2.9 <u>Farm Carpentry</u> (a) Uses carpentry skills to build or repair projects	10.2.9 <u>Farm Carpentry</u> (a) Demonstrates entry-level farm carpentry skills (b) Demonstrates safe use practices (c) Evaluates farm carpentry skills
10.2.10 <u>Finishing</u>	10.2.10 <u>Finishing</u> (a) Identifies finishing products and procedures	10.2.10 <u>Finishing</u> (a) Demonstrates basic painting and finishing procedures: • selects paints, varnishes • prepares surfaces • selects brushes • cares for brushes • applies paints, varnishes • stores brushes and paints (b) Demonstrates safe use practices	10.2.10 <u>Finishing</u> (a) Demonstrates entry-level finishing skills: • selects paints, varnishes • prepares surfaces • selects brushes • cares for brushes • applies paints, varnishes • stores brushes and paints (b) Demonstrates safe use practices (c) Evaluates completed work
10.2.11 <u>Concrete Work</u>	10.2.11 <u>Concrete Work</u>	10.2.11 <u>Concrete Work</u>	10.2.11 <u>Concrete Work</u> (a) Demonstrates entry-level ability to work with concrete (b) Selects materials (c) Measures and mixes (d) Makes reinforcements (e) Constructs forms (f) Finishes to standards (g) Demonstrates safe use practices (h) Evaluates completed concrete work

<u>Level 16</u>		<u>Level 26</u>		<u>Level 36</u>	
10.2.12 <u>Farm Electrics</u>	10.2.12 <u>Farm Electrics</u>	10.2.12 <u>Farm Electrics</u>		10.2.12 <u>Farm Electrics</u>	
				(a) Demonstrates safe use practices	
				(b) Recognizes simple circuits	
				(c) Plans wiring needs	
				(d) Reads and understands basic principles of the electrical code	
				(e) Operates electric motors	
				(f) Performs basic maintenance on electric motors	
				(g) Evaluates completed projects	
10.2.13 <u>Individual Project</u>	10.2.13 <u>Individual Project</u>	10.2.13 <u>Individual Project</u>		10.2.13 <u>Individual Project</u>	
	(a) Constructs a project related to farm use	(a) Uses combination of skills to construct a project related to farm use		(a) Demonstrates ability to improvise and construct a project	
	(b) Demonstrates safe use practices	(b) Demonstrates safe use practices		(b) Demonstrates safe use practices	
	(c) Evaluates completed project			(c) Evaluates completed work	
10.3 Work Standards	10.3 Work Standards	10.3 Work Standards		10.3 Work Standards	
	(a) Identifies related standards:	(a) Lists standards used for each project		(a) Lists standards used for each task	
	• safety				
	• quality				
	• efficiency				
	• cost				
	• replacement versus repair				
	• building codes				
		(b) Evaluates products from assigned tasks		(b) Works to accepted standards	
				(c) Evaluates own performance	
10.4 Supplies Management	10.4 Supplies Management	10.4 Supplies Management		10.4 Supplies Management	
	(a) Identifies good supply management strategies:	(a) Describes how supplies were selected, recorded and costed for each project completed at Level 26		(a) Compares how supplies were selected, recorded and costed for each project	
	• safety				
	• security				
	• cost				
	• location				
	• storage			(b) Conserves supplies	
				(c) Evaluates own performance	

Level 16Level 26Level 36**10.5 Work Area Management****10.5 Work Area Management**

- (a) Recognizes the need for safe and sanitary practices in each work area
- (b) Maintains a safe, clean work area

10.5 Work Area Management

- (a) Demonstrates care, safety and sanitation in each work area
- (b) Maintains a safe, clean work area

10.5 Work Area Management

- (a) Demonstrates leadership and initiative in management of work areas
- (b) Maintains a safe, clean work area
- (c) Evaluates own performance

INTEGRATED OCCUPATIONAL PROGRAM

OCCUPATIONAL COMPONENT

SCOPE AND SEQUENCE

Occupational Cluster: Agribusiness

Occupational Course: **AGRICULTURAL PRODUCTION**

Course Sequence: Agricultural Production 16–26–36

- Notes:**
1. Level 16 focuses on land and soil produced commodities.
 2. Level 26 focuses on further land usage and introduces animal production.
 3. Level 36 focuses on animal production.
 4. Additional topics may be used dependent upon local agriculture; e.g., beekeeping, hydroponics.
 5. Students indicating an interest in agriculture should be encouraged to consider taking the Agricultural Mechanics and Horticultural Services sequences.

GENERAL OBJECTIVES

1. To develop students' personal and interpersonal skills.
2. To develop students' awareness of opportunities and working conditions in agricultural production.
3. To develop students' knowledge and skills in agricultural practices and processes.
4. To enable students to obtain employment in a related occupation and/or to articulate with another secondary program or post-secondary institution for further education.

		<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10. WORK SKILLS				
10.1 Identification				
10.1.1 Job Scope	10.1.1 Job Scope	10.1.1 Job Scope	10.1.1 Job Scope	10.1.1 Job Scope
	(a) Defines "agriculture"	(a) Identifies local job and career opportunities	(a) Demonstrates ability to access job and career opportunities	
	(b) Identifies local agricultural products	(b) Identifies local agricultural operations: • service • processing • sales • production	(b) Identifies opportunities for continuing education	
	(c) Identifies scope of agricultural occupations			
	(d) Identifies local agricultural production and processing occupations			
10.1.2 <u>Historical Development of Agriculture</u>	10.1.2 <u>Historical Development of Agriculture</u>	10.1.2 <u>Historical Development of Agriculture</u>	10.1.2 <u>Historical Development of Agriculture</u>	10.1.2 <u>Historical Development of Agriculture</u>
	(a) Identifies historical changes in local production	(a) Identifies trends in agricultural production in Alberta	(a) Identifies the reasons for producing specific commodities	
	(b) Identifies reasons for changes in local production	(b) Identifies historical changes in Alberta's agricultural production		

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
	(c) Recognizes the effects of changes	(c) Identifies reasons for changes in Alberta's agricultural production	
	(d) Identifies trends in production	(d) Describes the scope of the food industry	
10.1.3 <u>The Food Chain</u>	10.1.3 <u>The Food Chain</u> (a) Defines a food chain	10.1.3 <u>The Food Chain</u> (a) Describes a food chain (b) Describes the relationship among the parts of a food chain	10.1.3 <u>The Food Chain</u> (a) Draws a food chain
10.1.4 <u>Producers and Consumers</u>	10.1.4 <u>Producers and Consumers</u> (a) Defines the terms: • producers • consumers • products (b) Identifies the steps used to move products to consumers (c) Identifies local agricultural producers (d) Identifies consumer trends and practices: • product quality • buying practices • advertising • packaging	10.1.4 <u>Producers and Consumers</u> (a) Recognizes the relationship between producers and consumers (b) Recognizes regional consumer trends and practices: • supply and demand • product quality • buying practices • advertising • packaging • consumer protection	10.1.4 <u>Producers and Consumers</u> (a) Identifies local producers and consumers
10.1.5 <u>Factors of Production</u>	10.1.5 <u>Factors of Production</u> (a) Identifies major determinants of production: • climate • soil and water • supply and demand • available equipment • labour • transportation	10.1.5 <u>Factors of Production</u> (a) Recognizes regional determinants of production: • climate • soil and water • market • transportation	10.1.5 <u>Factors of Production</u> (a) Lists determinants of production in local operations: • climate • soil and water • market • transportation

		<u>Level 16</u>		<u>Level 26</u>		<u>Level 36</u>	
10.2	Farm Safety	10.2	Farm Safety	10.2	Farm Safety	10.2	Farm Safety
10.2.1	<u>Farm Safety</u>	10.2.1	<u>Farm Safety</u> (a) Identifies safety procedures and practices: • farm buildings safety • farm machinery safety • personal safety	10.2.1	<u>Farm Safety</u> (a) Recognizes the importance of farm safety practices: • machine safety • livestock safety • personal safety	10.2.1	<u>Farm Safety</u> (a) Demonstrates entry-level farm safety practices: • machine safety • livestock safety • personal safety
10.3	Equipment, Tools and Supplies	10.3	Equipment, Tools and Supplies	10.3	Equipment, Tools and Supplies	10.3	Equipment, Tools and Supplies
10.3.1	<u>Land</u>	10.3.1	<u>Land</u> (a) Recognizes that land is a natural resource: • ownership • utilization (b) Identifies the basic origins of soil: • topsoil • subsoil • parent material (c) Describes physical features of soil: • texture • structure • porosity (d) Recognizes the causes of soil erosion: • water • wind	10.3.1	<u>Land</u> (a) Lists and describes land-produced agricultural products (b) Identifies the composition of soil: • mineral content • organic content • air • water (c) Takes and tests soil samples (d) Explains the causes of soil erosion (e) Uses two (minimum) pieces of land care equipment	10.3.1	<u>Land</u> (a) Analyzes soil: • pH • organic matter • chemical composition (b) Describes organisms in soil: • macro • micro (c) Demonstrates entry-level ability to operate two pieces of land care equipment (d) Demonstrates safe work practices
10.3.2	<u>Plant Production</u>	10.3.2	<u>Plant Production</u> (a) Identifies the importance of plants in the food chain (b) Identifies the major parts and functions of plants: • roots • stems • leaves • flowers	10.3.2	<u>Plant Production</u> (a) Identifies and describes basic plant processes: • photosynthesis • respiration • transpiration (b) Lists plants of economic importance: • fruit trees • ornamentals • cereals • vegetables • small fruits • trees	10.3.2	<u>Plant Production</u> (a) Identifies weed and pest control products (b) Performs basic maintenance on plant production, equipment and tools

Level 16

- (c) Identifies local agricultural crops
- (d) Germinates seeds under varied conditions
- (e) Lists the purpose and types of fertilizers
- (f) Grows and manages a crop:
 - prepares the seed bed
 - seeds
 - cultivates
 - harvests
 - stores the crop

Level 26

- (c) Describes the operation of a grain elevator
- (d) Describes the reasons for crop rotation
- (e) Grows and manages a variety of crops:
 - in protective environments
 - in natural environments
- (f) Identifies dangers to crops:
 - weather
 - weeds
 - insects
- (g) Describes the purpose of crop insurance

Level 36

- (c) Demonstrates safe work practices

10.3.3 Livestock Production10.3.3 Livestock Production10.3.3 Livestock Production

- (a) Develops a positive attitude toward livestock care and management
- (b) Identifies the needs of livestock:
 - owner commitment
 - owner care
- (c) Identifies the basic needs of livestock:
 - food
 - water
 - shelter
- (d) Identifies classes of livestock
- (e) Recognizes methods of handling and showing livestock

10.3.3 Livestock Production

- (a) Recognizes the basic principles of livestock nutrition
- (b) Identifies livestock digestive systems:
 - ruminants
 - non-ruminants
- (c) Identifies feed and feeding practices
- (d) Recognizes animal identification systems:
 - tattooing
 - branding
 - ear tagging
- (e) Identifies animal health practices:
 - castration
 - dehorning
 - vaccination
 - clipping/grooming
 - shearing
 - hoof care
 - parasite control

Level 16Level 26Level 36

- (f) Identifies jobs in the livestock industry

- (f) Identifies animal production-related industries
 (g) Identifies consumer buying practices of animal-related products
 (h) Tends farm animals
 (i) Demonstrates safe work practices
 (j) Evaluates own completed work

10.4	Work Standards	10.4	Work Standards	10.4	Work Standards	10.4	Work Standards
		(a)	Identifies examples of work standards: • employee standards • food safety standards procedures and practices	(a)	Appreciates the need for work standards	(a)	Demonstrates entry-level work standards: • time management • task management • organizational skills
				(b)	Demonstrates skills of time management	(b)	Maintains records
				(c)	Demonstrates skills of task management	(c)	Evaluates own performance
10.5	Supplies Management	10.5	Supplies Management	10.5	Supplies Management	10.5	Supplies Management
		(a)	Identifies appropriate supply management practices on a local farm	(a)	Appreciates value of supply management practices	(a)	Demonstrates supply management: • in-school projects • in-field projects
				(b)	Identifies inventory control and storage practices on a local farm	(b)	Evaluates own performance
10.6	Work Area Management	10.6	Work Area Management	10.6	Work Area Management	10.6	Work Area Management
		(a)	Recognizes the need for regular care and maintenance	(a)	Appreciates value of teamwork in agricultural production	(a)	Identifies production goals
		(b)	Maintains a safe, clean work area	(b)	Recognizes the need for teamwork in agricultural production	(b)	Works with others to achieve production goals
		(c)	Cleans tools and equipment after use	(c)	Maintains a safe, clean work area	(c)	Evaluates own and team's performance
						(d)	Maintains a safe, clean work area

INTEGRATED OCCUPATIONAL PROGRAM

OCCUPATIONAL COMPONENT

SCOPE AND SEQUENCE

Occupational Cluster: Agribusiness

Occupational Course: **HORTICULTURAL SERVICES**

Course Sequence: Horticultural Services 16–26–36

Notes:

1. Level 16 focuses on equipment and tools use, propagation techniques, vegetable garden planting and flower bed maintenance.
2. Level 26 focuses on lawn planting and maintenance, tree pruning, fall practices and greenhouse tasks.
3. Level 36 focuses on spring flower beds, weed control, bedding plants and floriculture techniques to entry-level standards.
4. Students interested in horticulture should be encouraged to consider taking the Agricultural Mechanics and Agricultural Production.

GENERAL OBJECTIVES

1. To develop students' personal and interpersonal skills.
2. To develop students' awareness of opportunities and working conditions in the horticulture industry.
3. To develop students' knowledge and skills in basic horticulture.
4. To enable students to obtain employment in a related occupation and/or to articulate with another secondary program or post-secondary institution for further education.

		<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10. WORK SKILLS				
10.1 Identification				
10.1.1 Job Scope	10.1.1 Job Scope	10.1.1 Job Scope	10.1.1 Job Scope	10.1.1 Job Scope
	(a) Defines industry terms: • horticulture • annual • biennial • perennial	(a) Describes and lists the knowledge and skills required for horticultural assistants	(a) Identifies entry-level jobs related to major job interest areas	
	(b) Identifies the scope of jobs performed by a horticultural assistant: • garden centre assistant • park maintenance assistant • landscape garden assistant • grounds maintenance assistant • greenhouse worker • tree pruning assistant • florist assistant	(b) Identifies local horticultural and related businesses	(b) Performs a local job search	
		(c) Identifies horticultural resource materials used by local industry	(c) Identifies entrepreneurial opportunities	

<u>Level 16</u>		<u>Level 26</u>		<u>Level 36</u>	
10.1.2	Equipment, Tools and Supplies	10.1.2	Equipment, Tools and Supplies (a) Identifies major equipment, tools and supplies used in horticulture (b) Identifies equipment and tools according to function	10.1.2	Equipment, Tools and Supplies (a) Labels horticulture equipment, tools and supply items (b) Inventories equipment, tools and supplies used by a local horticultural business
10.1.3	<u>Plant Processes</u>	10.1.3	<u>Plant Processes</u> (a) Identifies the basic needs of plants	10.1.3	<u>Plant Processes</u> (a) Describes the processes by which plants obtain their basic needs
10.1.3	<u>Plant Processes</u>	10.1.3	<u>Plant Processes</u> (a) Identifies and lists common plant supplements	10.1.3	<u>Plant Processes</u> (a) Identifies and lists common plant supplements
10.2	Equipment, Tools and Supplies Usage	10.2	Equipment, Tools and Supplies Usage (a) Identifies safety practices for use with equipment or tool items (b) Demonstrates safe use of basic equipment, tools and supplies	10.2	Equipment, Tools and Supplies Usage (a) Lists safety practices for use with each equipment or tool item (b) Demonstrates safe use of required equipment, tools and supplies
10.2	Equipment, Tools and Supplies Usage	10.2	Equipment, Tools and Supplies Usage (a) Demonstrates safe use of equipment, tools and supplies to entry-level proficiency (b) Identifies and records maintenance needs of equipment and tools	10.2	Equipment, Tools and Supplies Usage (a) Demonstrates safe use of equipment, tools and supplies to entry-level proficiency (b) Identifies and records maintenance needs of equipment and tools
10.2.1	<u>Lawn Maintenance</u>	10.2.1	<u>Lawn Maintenance</u> (a) Demonstrates safe use of lawn maintenance equipment: • lawn mowers • edge trimmers • power rakes • lawn sweeper (b) Identifies types of lawn fertilizers (c) Demonstrates sanitary refuse collection and disposal techniques (d) Demonstrates correct watering techniques	10.2.1	<u>Lawn Maintenance</u> (a) Demonstrates lawn care procedures: • collects leaves • cuts lawn • edges lawn • prunes shrubs and trees • tills flower beds and gardens (b) Identifies procedures for sodding a lawn (c) Compares lawn fertilization methods
10.2.1	<u>Lawn Maintenance</u>	10.2.1	<u>Lawn Maintenance</u> (a) Demonstrates preparation and sodding of a section of lawn (b) Evaluates own performance	10.2.1	<u>Lawn Maintenance</u> (a) Demonstrates preparation and sodding of a section of lawn (b) Evaluates own performance

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10.2.2 <u>Flower Bed Maintenance</u>	10.2.2 <u>Flower Bed Maintenance</u> (a) Demonstrates the use of hand tools for maintaining flower beds: • shallow cultivation • shallow digging • garbage, dead plant and weak growth removal (b) Identifies seasonal procedures for flower beds (c) Designs a flower bed	10.2.2 <u>Flower Bed Maintenance</u> (a) Demonstrates appropriate flower bed seasonal preparation (b) Demonstrates design and planting procedures for a flower bed	10.2.2 <u>Flower Bed Maintenance</u> (a) Plans, plants and maintains a flower bed (b) Labels each flower type (c) Evaluates own performance
10.2.3 <u>Weeds and Weed Control</u>	10.2.3 <u>Weeds and Weed Control</u> (a) Identifies weeds common to Alberta gardens (b) Describes the problems created by weeds (c) Demonstrates manual weed removal techniques	10.2.3 <u>Weeds and Weed Control</u> (a) Identifies weed control procedures: • manual • chemical	10.2.3 <u>Weeds and Weed Control</u> (a) Controls weeds: • manually • using prescribed chemicals (b) Demonstrates safe use practices (c) Evaluates own performance
10.2.4 <u>Trees and Shrubs</u>	10.2.4 <u>Trees and Shrubs</u> (a) Identifies five trees and five shrubs common to Alberta (b) Identifies the purpose of pruning (c) Identifies pruning techniques (d) Identifies pruning tools	10.2.4 <u>Trees and Shrubs</u> (a) Selects appropriate tools and demonstrates: • tree pruning • shrub pruning (b) Describes purpose and effects of pruning	10.2.4 <u>Trees and Shrubs</u> (a) Demonstrates procedures for pruning: • evergreens • hedges • fruit trees (b) Demonstrates safe use practices (c) Evaluates own performance
10.2.5 <u>Bedding Plants</u>	10.2.5 <u>Bedding Plants</u> (a) Identifies common bedding plants (b) Demonstrates procedures for growing bedding plants	10.2.5 <u>Bedding Plants</u> (a) Identifies bedding plant outlets in community (b) Plans planting procedures for bedding plants	10.2.5 <u>Bedding Plants</u> (a) Prepares growing medium for bedding plants (b) Grows own bedding plants (c) Evaluates own performance

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10.2.6 <u>House Plants</u>	10.2.6 <u>House Plants</u> (a) Identifies equipment, tools and supplies used in plant propagation (b) Demonstrates correct seeding techniques (c) Demonstrates vegetative propagation: • stem cutting • leaf cutting (d) Identifies six common house plants by: • common name • botanical name (e) Identifies care instructions for house plants (f) Demonstrates propagation and care tasks for house plants	10.2.6 <u>House Plants</u> (a) Demonstrates transplanting of seedlings: • spring sale packs • greenhouse benches (fall) (b) Demonstrates transplanting rooted cuttings (c) Demonstrates repotting of mature plants	10.2.6 <u>House Plants</u> (a) Demonstrates procedures for growing seasonal crops (b) Demonstrates correct care and treatment of house plants (c) Grows house plant(s) (d) Evaluates own performance
10.2.7 <u>Greenhouse Management</u>	10.2.7 <u>Greenhouse Management</u> (a) Identifies the function of a greenhouse (b) Identifies the factors that can be controlled in a greenhouse (c) Identifies tasks required to maintain a greenhouse (d) Identifies suitable locations for greenhouses	10.2.7 <u>Greenhouse Management</u> (a) Demonstrates ability to control greenhouse environment: • light • moisture • temperature (b) Takes daily environment readings: • temperature • humidity • plant observations • nutrient control	10.2.7 <u>Greenhouse Management</u> (a) Assists in maintaining a greenhouse to entry-level standards (b) Demonstrates safe use practices (c) Evaluates own performance
10.2.8 <u>Vegetable Gardening</u>	10.2.8 <u>Vegetable Gardening</u> (a) Identifies common garden vegetables (b) Demonstrates procedures for growing a vegetable crop (c) Demonstrates planting of vegetable garden	10.2.8 <u>Vegetable Gardening</u> (a) Demonstrates harvesting techniques (b) Identifies appropriate vegetable storage/preserving procedures	10.2.8 <u>Vegetable Gardening</u> (a) Identifies commercial methods of preparing vegetables

<u>Level 16</u>		<u>Level 26</u>		<u>Level 36</u>	
10.2.9	<u>Floriculture</u>	10.2.9	<u>Floriculture</u>	10.2.9	<u>Floriculture</u>
		(a)	Defines floriculture	(a)	Selects appropriate equipment, tools and supplies
		(b)	Identifies equipment, tools and supplies required for arranging: • fresh flowers • dry flowers	(b)	Prepares floriculture projects: • dry floral arrangements • seasonal arrangements • silk flower arrangements • boutonniere • centrepiece • corsage • wreath
		(c)	Demonstrates fresh flower arranging	(c)	Evaluates projects
10.2.10	<u>Sidewalk and Fence Care</u>	10.2.10	<u>Sidewalk and Fence Care</u>	10.2.10	<u>Sidewalk and Fence Care</u>
				(a)	Describes the purpose of sidewalk and fence care: • appearance • security • safety
				(b)	Demonstrates basic sidewalk and fence repair techniques
				(c)	Demonstrates seasonal care of paths and sidewalks
10.3	Work Standards	10.3	Work Standards	10.3	Work Standards
	(a) Describes the reasons for standards	(a)	Demonstrates accepted standards of horticulture	(a)	Lists standards used in horticulture
	(b) Identifies related standards: • sanitation • appearance • saleability • plant health • usability • garden cleanliness	(b)	Evaluates own performance monthly	(b)	Demonstrates performance standards for entry-level position
	(c) Maintains standards set by teacher/supervisor			(c)	Evaluates own performance

			<u>Level 16</u>		<u>Level 26</u>		<u>Level 36</u>
10.4	Supplies Management	10.4	Supplies Management	10.4	Supplies Management	10.4	Supplies Management
			(a) Identifies good supply management strategies: • inventory control • storage • security		(a) Describes supply management practices used in local operations		(a) Maintains proper supply management practices
							(b) Evaluates own performance
10.5	Work Area Management	10.5	Work Area Management	10.5	Work Area Management	10.5	Work Area Management
			(a) Identifies management strategies appropriate to each work site: • school grounds • greenhouse • community partner's garden		(a) Describes management strategies appropriate to each work site		(a) Selects appropriate management strategies in each work site
			(b) Maintains a safe, clean work area		(b) Maintains a safe, clean work area		(b) Maintains a safe, clean work area
							(c) Evaluates own performance

INTEGRATED OCCUPATIONAL PROGRAM

OCCUPATIONAL COMPONENT

SCOPE AND SEQUENCE

Occupational Cluster: Business and Office Operations

Occupational Course: **BUSINESS SERVICES**

Course Sequence: Business Services 16–26–36

- Notes:**
1. Business Services 16–26–36 is designed for students who are interested in working as shop assistants, sales clerks, sales representatives, couriers/messengers, receptionists, stock clerks or related jobs.
 2. Students indicating an interest in business and office services should be encouraged to take the Business Services and Office Services sequences.
 3. Business Services may also prove useful to students taking an occupational area outside the business cluster.

GENERAL OBJECTIVES

1. To develop students' personal and interpersonal skills.
2. To develop students' awareness of opportunities and employment conditions in the field of business services.
3. To develop students' knowledge and skills for business and business-related employment.
4. To enable students to obtain employment in a related occupation and/or to articulate with another secondary program or post-secondary institution for further education.

		<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10. WORK SKILLS				
10.1 Identification				
10.1.1 Job Scope	10.1.1 Job Scope	10.1.1 Job Scope	10.1.1 Job Scope	10.1.1 Job Scope
	(a) Identifies the jobs related to business services	(a) Describes the specific tasks performed by: • sales clerks • shop assistants • sales representatives • couriers • stock clerks	(a) Lists jobs/careers in the business industry	(b) Matches personal skills to business service jobs
10.1.2 Purpose of Business Services	10.1.2 Purpose of Business Services	10.1.2 Purpose of Business Services	10.1.2 Purpose of Business Services	10.1.2 Purpose of Business Services
	(a) Identifies the purpose and nature of business services	(a) Describes marketing	(a) Explains the purpose of the business industry	(b) Lists and describes methods of: • advertising • promoting • marketing
	(b) Defines related terms: • salesmanship • service • profit • production • merchandising • marketing • advertising	(b) Lists various types of products and services available in the marketplace		

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
		(c) Lists and matches product and service types with job opportunities	
10.1.3 <u>Retailing</u>	10.1.3 <u>Retailing</u> (a) Identifies the process of retailing/selling (b) Identifies and describes the meaning of: • inventories • stock control • merchandising • display (c) Identifies basic sales techniques (d) Demonstrates courteous sales techniques (e) Identifies and describes: • direct sales • personalized sales • supermarket sales	10.1.3 <u>Retailing</u> (a) Demonstrates a businesslike approach to retailing (b) Identifies customer's body language (c) Reads customer's body language; e.g., readiness to purchase (d) Identifies the procedures of selling: • opening techniques • closing techniques (e) Identifies sales techniques used: • for products • by stores (f) Identifies personal skills required for effective retailing (g) Identifies interpersonal skills required for effective retailing	10.1.3 <u>Retailing</u> (a) Describes sales techniques used for various products (b) Describes sales approaches used in different stores selling similar products (c) Lists and describes the relationship between selling goods and providing services (d) Describes different sales/service techniques: • point-of-sale techniques • direct sales techniques • telephone sales techniques • party sales techniques (e) Identifies the skills required to sell in specific product areas: • food products • leisure products • personal services • personal apparel • vehicles • homes • housewares
10.1.4 <u>Advertising and Promotion</u>	10.1.4 <u>Advertising and Promotion</u> (a) Defines "advertising", "promoting"	10.1.4 <u>Advertising and Promotion</u> (a) Compares the possible benefits of different types of advertising	10.1.4 <u>Advertising and Promotion</u> (a) Prepares an advertising campaign

Level 16

- (b) Describes the purpose of advertising
- (c) Identifies types of advertising used in business:
 - word of mouth
 - newspapers
 - magazines
 - radio
 - television
 - window displays
 - "free gifts"
 - lost leaders
- (d) Identifies promotional strategies and activities used in school:
 - school clubs
 - school dances
 - school concerts
 - attracting new students

Level 26

- (b) Identifies types of promotions used by businesses
- (c) Creates a promotional window display to acceptable standards

Level 36

- (b) Uses promotional products and activities
- (c) Evaluates a promotional window display for effectiveness
- (d) Identifies techniques used to promote oneself:
 - appearance/personality
 - clothes
 - grooming
 - résumé
 - business cards

10.1.5 Equipment, Tools and Supplies**10.1.5 Equipment, Tools and Supplies**

- (a) Identifies the equipment, tools and supplies used in business services

10.1.5 Equipment, Tools and Supplies

- (a) Describes the functions of:
 - cash registers
 - calculators
 - telephones

10.1.5 Equipment, Tools and Supplies

- (a) Describes the ways in which business information is:
 - received
 - stored
 - retrieved

10.1.6 Consumerism**10.1.6 Consumerism**

- (a) Defines consumerism
- (b) Identifies service industries
- (c) Recognizes meaning of "buyer beware"

10.1.6 Consumerism

- (a) Describes the meaning of credit
- (b) Identifies cautions required in buying on credit
- (c) Lists and describes types of insurance:
 - life insurance
 - personal property
 - business property
 - public liability
 - automobile insurance

10.1.6 Consumerism

- (a) Accesses sources of consumer information
- (b) Identifies and compares sources of credit
- (c) Investigates costs associated with various types of insurance

Level 16			Level 26			Level 36		
10.2	Equipment, Tools and Supplies Usage	10.2	Equipment, Tools and Supplies Usage	10.2	Equipment, Tools and Supplies Usage	10.2	Equipment, Tools and Supplies Usage	
10.2.1	<u>Calculators and Cash Registers</u>	10.2.1	<u>Calculators and Cash Registers</u> (a) Identifies the parts of a common cash register (b) Identifies the functions that cash registers may perform (c) Identifies security procedures for handling cash, giving change (d) Identifies and uses major keys of a cash register (e) Demonstrates ability to perform four basic math functions on a calculator	10.2.1	<u>Calculators and Cash Registers</u> (a) Controls cash from register: - identifies float - identifies sales - identifies operator (if "key" available) - calculates daily sales (b) Follows security procedures when accepting personal cheques (c) Identifies process for performing credit sales: - under \$50 - over \$50 (d) Rolls coinage (e) Completes daily sales record	10.2.1	<u>Calculators and Cash Registers</u> (a) Operates a cash register (b) Controls cash handling (c) Records daily, weekly, monthly cash flow (d) Demonstrates security measures when processing cheques (e) Demonstrates correct procedure for credit card sales (f) Evaluates own performance	
10.2.2	<u>Cashier Duties</u>	10.2.2	<u>Cashier Duties</u> (a) Identifies types of businesses that employ cashiers (b) Identifies working conditions and employment opportunities	10.2.2	<u>Cashier Duties</u> (a) Identifies the tasks performed by cashiers: - supermarkets - department stores - boutiques (b) Identifies the major components of a sales centre (c) Identifies bagging techniques: - supermarkets - department stores - boutiques	10.2.2	<u>Cashier Duties</u> (a) Demonstrates cashier's duties at entry level (b) Demonstrates warmth in dealing with customers (c) Makes change correctly	
10.2.3	<u>Telephone Techniques</u>	10.2.3	<u>Telephone Techniques</u> (a) Identifies appropriate telephone habits (b) Identifies business telephone procedures	10.2.3	<u>Telephone Techniques</u> (a) Demonstrates telephone rules (b) Demonstrates warmth and courtesy	10.2.3	<u>Telephone Techniques</u> (a) Responds correctly to incoming callers (b) Takes messages	

Level 16

- (c) Identifies the importance of the telephone in business communications
- (d) Identifies correct telephone use and caller considerations

Level 26

- (c) Communicates clearly
- (d) Demonstrates businesslike manner:
 - "I represent my business"
- (e) Demonstrates ability to:
 - make appointments
 - use emergency numbers
- (f) Demonstrates ability to use directories

Level 36

- (c) Books appointments
- (d) Uses "hold"
- (e) Transfers calls
- (f) Demonstrates ability to operate a basic switchboard
- (g) Evaluates own performance

10.2.4 Keyboarding

(NOTE: For students taking both Business Services and Office Services, use 10.2.4 to reinforce previous learning)

10.2.4 Keyboarding

- (a) Identifies proper posture criteria
- (b) Demonstrates use of manipulative parts of the keyboard
- (c) Displays touch familiarity with alphabetic keyboard
- (d) Composes and keyboards a personal letter
- (e) Identifies capabilities of keyboard related hardware:
 - word processors
 - computers
- (f) Identifies the use of computerized operating systems
- (g) Identifies and demonstrates basic care and maintenance of a keyboard and printer

10.2.4 Keyboarding

- (a) Composes and keyboards a personal letter
- (b) Composes and keyboards a business letter
- (c) Composes and keyboards a résumé
- (d) Identifies procedures for storage and management of:
 - documents
 - software
- (e) Demonstrates numeric familiarity

10.2.4 Keyboarding

- (a) Demonstrates basic keyboarding within acceptable speed and accuracy standards
- (b) Demonstrates touch-keyboarding techniques
- (c) Demonstrates ability to produce alphanumeric tabular products
- (d) Demonstrates proper posture
- (e) Demonstrates a well-organized work station
- (f) Evaluates own performance

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10.2.5 <u>Business Communications</u>	10.2.5 <u>Business Communications</u>	10.2.5 <u>Business Communications</u>	10.2.5 <u>Business Communications</u>
(NOTE: For students taking Business Services and Office Services, use 10.2.5 to reinforce previous learning)	(a) Identifies communication mechanisms and processes (b) Identifies correct procedures for self-introduction during business contacts (c) Identifies the purpose of using a business card (d) Identifies examples of non-verbal communications in business (e) Defines "good will" in the business context	(a) Demonstrates alternative methods of introducing oneself (b) Describes how "good will" is created in business (c) Produces a letter of introduction (d) Demonstrates ability to communicate verbally in business contexts (e) Demonstrates ability to "talk" to groups	(a) Demonstrates ability to introduce oneself (b) Demonstrates entry-level ability to communicate verbally (c) Demonstrates ability to introduce a product to a potential buyer, as performed by: • shop/sales clerks • sales representatives • stock clerks • couriers • cashiers (d) Describes the meaning of "buyer beware" (e) Evaluates own performance
10.2.6 <u>Record Keeping</u>	10.2.6 <u>Record Keeping</u>	10.2.6 <u>Record Keeping</u>	10.2.6 <u>Record Keeping</u>
	(a) Identifies the purpose of keeping records (b) Identifies basic methods of keeping records/storing information: • diaries • notes • files • computer software • tapes (c) Completes basic banking forms	(a) Keeps a record of daily activities (b) Demonstrates basic bookkeeping (c) Completes banking forms (d) Demonstrates a simple filing system: • alphabetic • numeric • subject • geographic	(a) Demonstrates entry-level record keeping skills (b) Demonstrates ability to maintain filing systems (c) Maintains basic banking records to entry level (d) Evaluates own performance

<u>Level 16</u>				<u>Level 26</u>				<u>Level 36</u>			
10.3	Work Standards	10.3	Work Standards	10.3	Work Standards	10.3	Work Standards	10.3	Work Standards		
		(a)	Identifies related standards: • safety • quality • efficiency		(a)	Lists standards used in individual activities/projects		(a)	Works to accepted standards		
		(b)	Works to standards		(b)	Evaluates completed activities/products		(b)	Demonstrates ability to follow instructions		
					(c)	Works to standards		(c)	Evaluates own performance		
10.4	Supplies Management	10.4	Supplies Management	10.4	Supplies Management	10.4	Supplies Management	10.4	Supplies Management		
		(a)	Identifies good supply management strategies: • safety • security • cost • storage		(a)	Demonstrates proper supply management practices		(a)	Demonstrates entry-level supply management practices		
								(b)	Evaluates own performance		
10.5	Work Area Management	10.5	Work Area Management	10.5	Work Area Management	10.5	Work Area Management	10.5	Work Area Management		
		(a)	Recognizes the need for safe and sanitary work area management practices		(a)	Lists and describes the characteristics of a businesslike environment		(a)	Priorizes jobs in order of importance		
		(b)	Maintains a safe, clean work area		(b)	Maintains a safe, clean work area		(b)	Demonstrates leadership and initiative		
								(c)	Evaluates own performance		

INTEGRATED OCCUPATIONAL PROGRAM

OCCUPATIONAL COMPONENT

SCOPE AND SEQUENCE

Occupational Cluster: **Business and Office Operations**

Occupational Course: **OFFICE SERVICES**

Course Sequence: **Office Services 16–26–36**

- Notes:**
1. Office Services 16–26–36 is designed for students who are interested in office work in private businesses or in public institutions.
 2. Level 16 focuses on equipment identification, introductory keyboarding, business calculations, filing, mail handling, telephone procedures and importance of the industry.
 3. Level 26 focuses on task identification, word processing, telephone use, writing business letters, mail handling and filing.
 4. Level 36 focuses on planning, organization, reception duties and demonstration of previous skills to entry-level standards.
 5. Students indicating a strong interest in business should be encouraged to take the Business Services sequence in addition to Office Services.

GENERAL OBJECTIVES

1. To develop students' personal and interpersonal skills.
2. To develop students' awareness of opportunities and employment conditions in the field of office services.
3. To develop students' knowledge and skills in business and office practices.
4. To enable students to obtain employment in a related occupation and/or to articulate with another secondary program or post-secondary institution for further education.

		<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10. WORK SKILLS				
10.1 Identification				
10.1.1 Job Scope	10.1.1 Job Scope	10.1.1 Job Scope	10.1.1 Job Scope	10.1.1 Job Scope
	(a) Identifies and describes careers related to office services: • receptionists • mail clerks • file clerks • typists • office assistants • word processing clerks • desktop publishers • telephone operators	(a) Describes the tasks performed in selected office services careers	(a) Lists current jobs/careers in office services	
		(b) Identifies examples of businesses that hire office services employees	(b) Matches personal skills related to jobs available in office services	
10.1.2 Equipment, Tools and Supplies	10.1.2 Equipment, Tools and Supplies	10.1.2 Equipment, Tools and Supplies	10.1.2 Equipment, Tools and Supplies	10.1.2 Equipment, Tools and Supplies
	(a) Identifies equipment, tools and supplies in office service areas	(a) Inventories equipment, tools and supplies in an office	(a) Recognizes and records condition of equipment and tools	

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10.1.3 <u>Purpose of Office Services</u>	10.1.3 <u>Purpose of Office Services</u> (a) Identifies the purposes of office services (b) Defines related terms: • keyboarding • information • mail handling	10.1.3 <u>Purpose of Office Services</u> (a) Lists and describes types of office services performed in: • general offices • professional offices • office pools (b) Identifies specialized office services areas	10.1.3 <u>Purpose of Office Services</u> (a) Explains the role of office workers in the workplace (b) Lists and describes office services performed in various types of offices
10.2 Equipment, Tools and Supplies Usage	10.2 Equipment, Tools and Supplies Usage	10.2 Equipment, Tools and Supplies Usage	10.2 Equipment, Tools and Supplies Usage
10.2.1 <u>Keyboarding</u> (NOTE: For students taking Office Services and Business Services, use 10.2.1 to reinforce previous learning)	10.2.1 <u>Keyboarding</u> (a) Identifies proper posture (b) Identifies basic business QWERTY keyboard (c) Identifies and uses touch-keyboarding procedures (d) Identifies and demonstrates proper keyboarding posture and positioning (e) Identifies keyboard keys: • alphabetic • numeric • symbolic • function (f) Identifies parts of simple business letters (g) Demonstrates use of keyboard to produce simple: • letters in block format – open punctuation • envelopes • memorandums • basic horizontal and vertical centring	10.2.1 <u>Keyboarding</u> (a) Demonstrates touch-keyboarding of: • letters • reports (b) Demonstrates ability to perform basic proofreading and use spell checkers and dictionaries (c) Identifies components of a word processing system: • software • hardware (d) Produces reports using word processor and/or memory typewriter (e) Demonstrates ability to use tabulation keys in production of tables (f) Maintains a well-organized work station	10.2.1 <u>Keyboarding</u> (a) Demonstrates proper posture and positioning (b) Demonstrates basic touch-keyboarding ability to entry level (c) Demonstrates proof-reading and basic editing skills to entry level (d) Demonstrates basic ability to use word processor and/or memory typewriter (e) Demonstrates basic ability to use an electronic printer (f) Produces a business letter and report within acceptable business standards (g) Creates and maintains a well-organized work station

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
	(h) Identifies and uses basic proofreading techniques (i) Identifies and practises correct work station maintenance procedures		(h) Evaluates own performance
10.2.2 <u>Planning and Organizing</u>	10.2.2 <u>Planning and Organizing</u> (a) Identifies the basic stages in planning and organizing work (b) Identifies the job positions common to a typical office	10.2.2 <u>Planning and Organizing</u> (a) Describes the meaning of "management" (b) Identifies the duties of an office manager (c) Identifies and describes the responsibilities of an employer (d) Identifies and describes employee responsibilities	10.2.2 <u>Planning and Organizing</u> (a) Identifies the planning and organizing duties of office services workers: • mail clerks • file clerks • telephone operators • receptionists (b) Demonstrates entry-level ability to plan and organize (c) Evaluates own performance
10.2.3 <u>Business Calculations</u>	10.2.3 <u>Business Calculations</u> (a) Identifies use of calculation in business (b) Identifies methods of calculating: • manual • electronic (c) Touch calculations: • posture • hand position • four basic functions • decimals (d) Calculates payroll: • hourly • daily • weekly • monthly (e) Calculates invoices: • basic • discounts • tax • terms	10.2.3 <u>Business Calculations</u> (a) Demonstrates use of calculation skills: • manual • electronic (b) Demonstrates advanced uses of calculators	10.2.3 <u>Business Calculations</u> (a) Calculates payroll increases, if given percentage increase in pay (b) Calculates payroll deductions, if making percentage contribution to charity (c) Performs related office calculations (d) Evaluates own performance

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10.3	Business Communication	10.3 Business Communication	10.3 Business Communication
10.3.1	<u>Writing Techniques</u>	10.3.1 <u>Writing Techniques</u>	10.3.1 <u>Writing Techniques</u>
	(a) Writes legibly	(a) Demonstrates increased vocabulary and spelling ability	(a) Demonstrates job entry-level writing and spelling ability
	(b) Spells familiar business terms correctly	(b) Applies word division skills	(b) Demonstrates basic composition skills
	(c) Uses dictionary to check unfamiliar spellings	(c) Composes a basic business letter	(c) Demonstrates use of basic reference sources to entry level
	(d) Uses proper punctuation	(d) Identifies basic business reference sources	(d) Evaluates own performance
	(e) Composes a paragraph		
10.3.2	<u>Electronic Techniques</u>	10.3.2 <u>Electronic Techniques</u>	10.3.2 <u>Electronic Techniques</u>
	(a) Identifies and describes common electronic communications devices: • telephone • telex • fax • networking	(a) Demonstrates knowledge of electronic communications devices	(a) Demonstrates entry-level knowledge of electronic communications devices
	(b) Identifies the procedures for using a business telephone	(b) Places business calls	(b) Demonstrates ability to use the telephone: • receive local calls • place local calls
	(c) Identifies and demonstrates telephone etiquette	(c) Receives business calls	(c) Identifies and describes the operation of a simple switchboard
	(d) Identifies and demonstrates use of directory information pages	(d) Handles inquiry calls	(d) Demonstrates basic skills in using a simple switchboard
		(e) Identifies procedures for: • handling complaints • taking messages • putting callers on hold	(e) Demonstrates correct telephone etiquette
		(f) Demonstrates use of telephone directories: • yellow pages • white pages	(f) Demonstrates ability to use emergency numbers
		(g) Identifies the qualities of a good telephone operator	(g) Demonstrates a business voice quality

Level 16Level 26Level 36

- (h) Demonstrates ability to place long distance calls and calculate:
 - time zones
 - time and charges
- (i) Evaluates own performance

10.4 Office Duties**10.4 Office Duties****10.4 Office Duties****10.4 Office Duties****10.4.1 Reception****10.4.1 Reception**

- (a) Identifies procedures for scheduling business appointments
- (b) Identifies and practises effective people-handling skills

10.4.1 Reception

- (a) Lists and describes common booking requirements:
 - meetings
 - appointments
 - reservations
- (b) Books facilities

10.4.1 Reception

- (a) Demonstrates ability to make appointments
- (b) Demonstrates making travel arrangements and preparing itineraries
- (c) Demonstrates booking a hotel room
- (d) Demonstrates renting a vehicle
- (e) Demonstrates booking meals at restaurants
- (f) Demonstrates ability to handle people efficiently and effectively
- (g) Evaluates own performance

10.4.2 Handling Mail**10.4.2 Handling Mail**

- (a) Identifies common procedures for handling mail:
 - incoming
 - outgoing
 - stamping
- (b) Demonstrates ability to determine and use postal codes

10.4.2 Handling Mail

- (a) Demonstrates handling and sorting mail:
 - incoming
 - outgoing
- (b) Identifies business methods for:
 - folding letters
 - stuffing envelopes
- (c) Identifies equipment and process for determining postage rates
- (d) Identifies the purposes of special delivery service

10.4.2 Handling Mail

- (a) Demonstrates entry-level skills in handling office mail
- (b) Uses postal machine
- (c) Reads postal machine meter
- (d) Demonstrates procedures for servicing postal machines

Level 16Level 26Level 36

- (e) Identifies the process of:
- registering mail
 - acknowledging receipt of mail

- (e) Prepares mail for special delivery services:
- registers
 - acknowledgement of receipt
 - wraps
 - bundles
 - special delivery
 - courier/messenger

- (f) Demonstrates common techniques for grouping/sorting outgoing mail:
- wrapping
 - bundling
 - courier service

- (f) Affixes correct labels for a variety of special postal services

- (g) Identifies the process of sending electronic mail
- (h) Evaluates own performance

10.4.3 Duplicating10.4.3 Duplicating

- (a) Identifies common duplicating equipment
- (b) Identifies and demonstrates basic duplicating operations
- (c) Identifies handling process of basic office duplication
- (d) Stacks production

10.4.3 Duplicating

- (a) Demonstrates use of office duplicators
- (b) Adds paper to duplicating machine
- (c) Identifies instructions to clear "jams"
- (d) Collates production
- (e) Records production

10.4.3 Duplicating

- (a) Demonstrates entry-level ability to handle duplication tasks
- (b) Demonstrates entry-level ability to correct "jams"
- (c) Evaluates own performance

10.4.4 Records Management10.4.4 Records Management

- (a) Identifies the purposes of filing systems
- (b) Identifies filing systems:
- alphabetic
 - numeric
 - subject
 - geographic
- (c) Identifies uses of filing systems

10.4.4 Records Management

- (a) Demonstrates ability to file using each basic system
- (b) Identifies the equipment and processes for:
- mechanical filing
 - microfiche and films
 - electronic filing

10.4.4 Records Management

- (a) Demonstrates entry-level filing skills
- (b) Observes and describes filing systems used in:
- schools
 - offices
 - shops
 - stores
- (c) Evaluates own performance

		<u>Level 16</u>		<u>Level 26</u>		<u>Level 36</u>	
10.5	Work Standards	10.5	Work Standards	10.5	Work Standards	10.5	Work Standards
		(a)	Identifies basic office work standards	(a)	Demonstrates personal and public hygiene practices	(a)	Demonstrates entry-level work standards
		(b)	Completes tasks to standards	(b)	Projects a businesslike image	(b)	Demonstrates ability to follow instructions
				(c)	Completes tasks to standards	(c)	Evaluates own performance
10.6	Supplies Management	10.6	Supplies Management	10.6	Supplies Management	10.6	Supplies Management
		(a)	Identifies supplies commonly found in an office	(a)	Identifies wholesale and retail suppliers of office material in community	(a)	Demonstrates care in the use of supplies
				(b)	Prepares a supplies requisition	(b)	Maintains office supplies
10.7	Work Area Management	10.7	Work Area Management	10.7	Work Area Management	10.7	Work Area Management
		(a)	Describes businesslike environment	(a)	Lists and describes the characteristics of a businesslike environment	(a)	Prioritizes jobs in order of importance
		(b)	Identifies the practices of maintaining an office work area	(b)	Lists the support duties performed to maintain an office	(b)	Demonstrates leadership and initiative
		(c)	Maintains a safe, clean work area	(c)	Maintains a safe, clean work area	(c)	Demonstrates accuracy and efficiency in completing duties
						(d)	Maintains a safe, clean work area
						(e)	Evaluates own performance

INTEGRATED OCCUPATIONAL PROGRAM

OCCUPATIONAL COMPONENT

SCOPE AND SEQUENCE

Occupational Cluster: Construction and Fabrication

Occupational Course: **BUILDING SERVICES**

Course Sequence: Building Services 16–26–36

- Notes:**
1. Building Services 16–26–36 provides students with opportunities to explore and experience the jobs performed by sub-trades within the building industry.
 2. At the 16-level, tool handling and care, woodwork, fasteners and basic technical drawing are primary activities.
 3. At the 26-level, additional areas include framing, scaffolding, roofing and flooring.
 4. Level 36 provides students with the opportunity to focus on one or more subtrades, including painting and decorating, cement work, bricklaying or glasswork.
 5. Students wishing to expand their skills in the building industry should be encouraged to take Construction Services.

GENERAL OBJECTIVES

1. To develop students' personal and interpersonal skills.
2. To develop students' awareness of opportunities and working conditions in services related to the building industry.
3. To develop students' knowledge and basic skills in a variety of services related to the building industry.
4. To enable students to obtain employment in a related occupation and/or to articulate with another secondary program or post-secondary institution for further education.

		<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10. WORK SKILLS				
10.1 Identification				
10.1.1 Job Scope	10.1.1 Job Scope	10.1.1 Job Scope	10.1.1 Job Scope	10.1.1 Job Scope
	(a) Identifies the scope of the building service trades	(a) Lists and describes the building subtrades	(a) Identifies subtrade(s) of primary interest	
	(b) Describes the term "subtrades"	(b) Identifies subtrade contractors in community according to trades: • excavators • framers • cribbers • painters • drywallers • tilers • scaffolders • siding installers • roofers • cabinetmakers • plumbers • electricians • glaziers • floorcoverers	(b) Matches personal abilities and work skills to subtrades of interest	

Level 16

- (c) Relates subtrades to the construction industry
- (d) Identifies apprenticeship and non-apprenticeship subtrades
- (e) Identifies opportunities in the subtrades for:
 - full-time employment
 - part-time employment

Level 26Level 36

- (c) Recognizes the need for further training in one or more subtrades
- (d) Performs a job search for entry-level positions in a selected subtrade
- (e) Identifies local entrepreneurial opportunities in building services

10.1.2 Equipment, Tools and Supplies
10.1.2 Equipment, Tools and Supplies

- (a) Identifies common power equipment and tools
- (b) Identifies common hand tools
- (c) Identifies safe use practices of equipment and tools
- (d) Identifies supply items commonly used in building trades:
 - wood
 - shingles
 - tiles
 - glass
 - pipes
 - paints and stains
 - drywall
 - siding
 - concrete

10.1.2 Equipment, Tools and Supplies

- (a) Lists and describes equipment and tools commonly used by each subtrade
- (b) Lists and describes supply items commonly used in each subtrade
- (c) Names each hand tool and describes its safe use practices

10.1.2 Equipment, Tools and Supplies

- (a) Identifies and records condition of equipment and tools
- (b) Identifies and records maintenance needs of equipment and tools
- (c) Recognizes the diversity of supplies used in the subtrades

10.2 Equipment, Tools and Supplies Usage
10.2 Equipment, Tools and Supplies Usage

- (a) Demonstrates correct handling of equipment
- (b) Demonstrates correct handling of each power tool

10.2 Equipment, Tools and Supplies Usage

- (a) Demonstrates ability to use, clean and return equipment, tools and supplies to correct storage area
- (b) Demonstrates safe use practices

10.2 Equipment, Tools and Supplies Usage

- (a) Demonstrates entry-level skills with:
 - hand tools
 - common power tools
- (b) Demonstrates basic equipment and tool maintenance

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
	(c) Demonstrates correct handling of each hand tool (d) Demonstrates correct use of common measuring tools (e) Identifies correct storage locations for each item of equipment, tools and supplies (f) Demonstrates safe use practices		(c) Demonstrates acceptable cleaning and storage procedures (d) Demonstrates safe use practices
10.2.1 <u>Ladders and Scaffolds</u>	10.2.1 <u>Ladders and Scaffolds</u> (a) Identifies types and purposes of ladders (b) Identifies the types and purpose of scaffolds (c) Identifies safe use practices (d) Demonstrates safe use practices when ladders and scaffolds are required	10.2.1 <u>Ladders and Scaffolds</u> (a) Identifies correct placement and safe use of ladders (b) Identifies the parts of a scaffold (c) Applies safe construction and safe use practices (d) Demonstrates ability to construct a one level scaffold	10.2.1 <u>Ladders and Scaffolds</u> (a) Climbs and uses scaffolds and ladders according to entry-level safety practices (b) Evaluates own performance
10.2.2 <u>Drawing and Planning</u>	10.2.2 <u>Drawing and Planning</u> (a) Identifies the need for planning in building trades (b) Identifies types of drawings used in the building trades (c) Identifies purpose of sketches, drawings, blueprints (d) Defines and describes the terms: • elevation view • floor plan • sectional view (e) Sketches simple object (f) Identifies and draws symbols (g) Identifies procedure for drawing to scale (h) Draws simple object to scale	10.2.2 <u>Drawing and Planning</u> (a) Selects a project and draws to scale (b) Identifies procedures for making blueprints	10.2.2 <u>Drawing and Planning</u> (a) Uses technical drawing and planning in project work (b) Evaluates own performance

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10.2.3 <u>Wood Products</u>	10.2.3 <u>Wood Products</u> (a) Identifies wood according to physical properties: • hardness • strength • colour • workability • durability (b) Lists three hardwoods and three softwoods commonly used in building trades (c) Identifies the relative costs of different woods (d) Identifies wood by grade (e) Identifies wood by sizes commonly used in industry (f) Constructs wood project	10.2.3 <u>Wood Products</u> (a) Selects a project requiring use of wood (b) Completes project demonstrating appropriate use of equipment, tools and supplies (c) Demonstrates safe practices	10.2.3 <u>Wood Products</u> (a) Completes an advanced wood project (optional) (b) Demonstrates safe practices (c) Evaluates own performance
10.2.4 <u>Fasteners</u>	10.2.4 <u>Fasteners</u> (a) Identifies types of glue/adhesives in common use (b) Lists advantages and disadvantages of each glue/adhesive (c) Identifies and lists common uses of each type of glue/adhesive (d) Glues building materials together (e) Identifies fastening devices and their uses (f) Identifies nails and screws by size and strength (g) Demonstrates ability to select appropriate fasteners (h) Demonstrates correct technique to use fasteners (i) Identifies process of countersinking (j) Demonstrates countersinking	10.2.4 <u>Fasteners</u> (a) Demonstrates ability to identify and use adhesive/glue materials (b) Demonstrates ability to identify and use nails and screws correctly (c) Demonstrates ability to countersink nails and screws	10.2.4 <u>Fasteners</u> (a) Demonstrates basic entry-level ability to select and correctly use adhesives and metal fasteners (b) Demonstrates safe use practices (c) Evaluates own performance

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10.2.5 <u>Framing</u>	10.2.5 <u>Framing</u> (a) Identifies the purpose of framing (b) Identifies framing as a building subtrade (c) Identifies the terms: • square • plumb • building standard (d) Identifies materials used for framing: • wood • concrete • metal (e) Identifies safe practices	10.2.5 <u>Framing</u> (a) Identifies the terms related to framing: • plate layout • corners • nailing • sheathing • squaring (b) Reads a simple blueprint and identifies the parts of a frame: • studs • rafters • plates • jacks • cripples (c) Constructs a simple frame using wood (d) Demonstrates ability to identify if frame is true and plumb (e) Demonstrates safe practices (f) Identifies local framing businesses	10.2.5 <u>Framing</u> (a) Demonstrates ability to use terms related to framing (b) Demonstrates ability to construct a true and plumb framing (c) Demonstrates entry-level safety standards (d) Evaluates own performance
10.2.6 <u>Roofing</u>	10.2.6 <u>Roofing</u> (a) Identifies purpose of roofing (b) Identifies types of roofing materials (c) Installs roofing material (d) Identifies safe practices	10.2.6 <u>Roofing</u> (a) Calculates area of a roof (b) Identifies dimensions of different roofing materials and their cost (c) Calculates: • amount of roofing required • cost of roofing materials (d) Discusses the "appearance value" of different roofing materials: • shingles • shakes • tiles • roll roofing	10.2.6 <u>Roofing</u> (a) Demonstrates ability to fasten roofing materials to entry-level standards (b) Demonstrates ability to calculate roof area and cost of purchasing roofing materials (c) Demonstrates entry-level safety practices (d) Evaluates own performance

<u>Level 16</u>		<u>Level 26</u>	<u>Level 36</u>
		(e) Demonstrates techniques of fastening each type of roofing material	
		(f) Demonstrates safe practices	
		(g) Identifies local roofing businesses	
10.2.7 <u>Flooring</u>	10.2.7 <u>Flooring</u>	10.2.7 <u>Flooring</u>	10.2.7 <u>Flooring</u>
		(a) Identifies types of flooring	(a) Demonstrates replacing floor covering to entry-level standards: • measures • removes old flooring • installs new flooring
		(b) Identifies methods of removing old floor coverings	(b) Demonstrates safe practices
		(c) Demonstrates techniques of: • measuring floor area • calculating floor area	(c) Evaluates own performance
		(d) Demonstrates ability to cut floor covering materials	
		(e) Demonstrates basic installations: • linoleum • lino tile • carpet • ceramic tile • wood tile	
		(f) Demonstrates safe practices	
		(g) Identifies local flooring businesses	
10.2.8 <u>Painting and Decorating</u>	10.2.8 <u>Painting and Decorating</u>	10.2.8 <u>Painting and Decorating</u>	10.2.8 <u>Painting and Decorating</u>
	(a) Identifies painting and decorating as a subtrade	(a) Recognizes painting and decorating as a building subtrade	(a) Identifies duties of a painter/decorator
		(b) Identifies local painting and decorating businesses	(b) Identifies the tools of a painter
			(c) Identifies common painter's supplies: • types of paints • varnishes • stains

Level 16

Level 26

Level 36

- (d) Selects suitable finishing products
- (e) Demonstrates the ability to remove old paint
- (f) Demonstrates suitable surface preparation:
 - cleaning
 - sanding
 - crack filling
- (g) Demonstrates correct techniques of using paintbrushes and rollers on wood and plaster surfaces
- (h) Identifies the need for extensions to rollers and brushes
- (i) Demonstrates acceptable masking and protecting techniques
- (j) Demonstrates correct brush cleaning and storage techniques
- (k) Identifies wallpaper hanging techniques
- (l) Demonstrates ability to:
 - handle wallpaper
 - use a plumb line
 - use wallpaper paste
 - use prepasted wallpaper
 - hang paper
 - match paper seams
 - finish seams
- (m) Demonstrates entry-level ability to strip wallpaper with steam
- (n) Demonstrates safe and sanitary practices in all operations
- (o) Evaluates own performance

10.2.9 Siding

10.2.9 Siding

- (a) Identifies siding installation as a building subtrade

10.2.9 Siding

- (a) Lists local siding installation businesses

10.2.9 Siding

- (a) Identifies types of siding
- (b) Identifies the soffits and fascia of a house

Level 16

Level 26

Level 36

10.2.10 Concrete Work

10.2.10 Concrete Work

- (a) Identifies concrete work as a building subtrade

10.2.10 Concrete Work

- (a) Lists local concrete businesses

10.2.10 Concrete Work

- (c) Installs siding materials:
 - vinyl
 - aluminum
 - wood
 - stucco
 - brick veneer
 - rock veneer
 - (d) Demonstrates safe work practices
 - (e) Evaluates own performance
- (a) Lists the possible uses for cement and cement products
 - (b) Constructs a simple form to hold concrete, using wood or metal
 - (c) Follows instructions for mixing concrete
 - (d) Lays concrete in a form and demonstrates correct damping techniques
 - (e) Demonstrates suitable surface finishing for small projects
 - (f) Demonstrates safe and sanitary practices
 - (g) Evaluates own performance

10.2.11 Bricklaying

10.2.11 Bricklaying

- (a) Identifies bricklaying as a building subtrade

10.2.11 Bricklaying

- (a) Lists local bricklaying businesses

10.2.11 Bricklaying

- (a) Lists possible uses for bricks, brick blocks and decorative stones
- (b) Demonstrates ability to mix mortars and cement
- (c) Demonstrates basic ability to use a cement trowel
- (d) Demonstrates basic ability to lay brick
- (e) Demonstrates basic ability to place/apply and secure brick blocks and decorative stones
- (f) Demonstrates safe and sanitary practices
- (g) Evaluates own performance

		<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10.2.12	<u>Glasswork</u>	10.2.12 <u>Glasswork</u> (a) Identifies glasswork as a building subtrade	10.2.12 <u>Glasswork</u> (a) Lists local glasswork businesses	10.2.12 <u>Glasswork</u> (a) Identifies uses of glass in buildings: • protection • visibility • light • decoration (b) Demonstrates ability to identify and use glass cutting tools (c) Measures a window frame (d) Transfers measurements of frame to glass (e) Cuts and separates glass to correct measurement (f) Removes broken glass from a window (g) Installs new pane of glass (h) Applies/attaches adhesives/glass supports (i) Demonstrates safe and sanitary handling and disposal of glass (j) Evaluates own performance
10.3	Work Standards	10.3 Work Standards (a) Identifies the major categories of the building code (b) Demonstrates the ability to work to standards set by teachers and supervisors	10.3 Work Standards (a) Demonstrates willingness to work to standards set in each subtrade (b) Demonstrates the ability to work to standards set by teacher/supervisor	10.3 Work Standards (a) Demonstrates ability to conform to entry-level standards in specific subtrades (b) Demonstrates basic entry-level standards of performance in specific subtrades (c) Evaluates own performance
10.4	Supplies Management	10.4 Supplies Management (a) Identifies the importance of safe, secure and sanitary supply management practices (b) Uses supplies efficiently and effectively	10.4 Supplies Management (a) Describes the meaning of the terms "efficient" and "effective" supply management (b) Uses supplies efficiently and effectively	10.4 Supplies Management (a) Demonstrates ability to manage supplies in specific subtrades (b) Uses supplies efficiently and effectively (c) Evaluates own performance

Level 16Level 26Level 36

10.5 **Work Area
Management**

10.5 **Work Area Management**

- (a) Identifies the basic procedures used to care for and manage a work area
- (b) Maintains a safe, clean work area

10.5 **Work Area Management**

- (a) Lists and describes work area management duties in specific subtrades
- (b) Maintains a safe, clean work area

10.5 **Work Area Management**

- (a) Demonstrates leadership and initiative in work area management
- (b) Works with others to maintain work area to standards
- (c) Evaluates own performance

INTEGRATED OCCUPATIONAL PROGRAM

OCCUPATIONAL COMPONENT

SCOPE AND SEQUENCE

Occupational Cluster: Construction and Fabrication

Occupational Course: **CONSTRUCTION SERVICES**

Course Sequence: Construction Services 16–26–36

- Notes:**
1. Construction Services 16–26–36 provides students with opportunities to explore trade areas within the construction industry.
 2. At the 16-level, tool handling and care, blueprint reading and general piping are primary activities.
 3. Level 26 focuses on heating services, gasfitting, electrical services, welding and insulating.
 4. Level 36 provides students with the opportunity to focus on one or more of the areas covered previously.
 5. Students wishing to expand their skills in the construction industry should be encouraged to take Building Services in conjunction with Construction Services.

GENERAL OBJECTIVES

1. To develop students' personal and interpersonal skills.
2. To develop students' awareness of opportunities and employment conditions in services related to the construction industry.
3. To develop students' knowledge and basic skills in the construction industry.
4. To enable students to obtain employment in a related occupation and/or to articulate with another secondary program or post-secondary institution for further education.

		<u>Level 16</u>		<u>Level 26</u>		<u>Level 36</u>	
10. WORK SKILLS							
10.1 Identification							
10.1.1	Job Scope	10.1.1	Job Scope	10.1.1	Job Scope	10.1.1	Job Scope
		(a)	Identifies the scope of the construction industry	(a)	Lists and describes jobs related to the construction industry	(a)	Identifies area of primary interest in construction industry
		(b)	Identifies careers in construction	(b)	Identifies construction industry contractors in community according to trades	(b)	Matches personal and work skills to area of interest
		(c)	Identifies opportunities in the industry for: • full-time employment • casual employment			(c)	Recognizes the need for further training in area of interest
						(d)	Performs a local job search in an area of interest
						(e)	Identifies local entrepreneurial opportunities
10.1.2	Equipment, Tools and Supplies	10.1.2	Equipment, Tools and Supplies	10.1.2	Equipment, Tools and Supplies	10.1.2	Equipment, Tools and Supplies
		(a)	Identifies equipment commonly used in the construction industry	(a)	Lists and describes equipment and tools commonly used in the industry	(a)	Identifies and records condition of equipment and tools in use

		<u>Level 16</u>		<u>Level 26</u>		<u>Level 36</u>
		(b) Identifies commonly used power tools		(b) Names each power tool and describes its safe use practice		(b) Identifies and records service needs of equipment and tools
		(c) Identifies commonly used hand tools		(c) Names each hand tool and describes its safe use practice		(c) Recognizes the diversity of supplies used in the industry
		(d) Identifies safe use practices				
10.2	Equipment, Tools and Supplies Usage	10.2 Equipment, Tools and Supplies Usage	10.2 Equipment, Tools and Supplies Usage	10.2 Equipment, Tools and Supplies Usage	10.2 Equipment, Tools and Supplies Usage	
		(a) Demonstrates correct handling of equipment		(a) Demonstrates ability to use, clean and return equipment, tools and supplies to correct storage area		(a) Demonstrates basic entry-level skills with: • hand tools • power tools
		(b) Demonstrates correct handling of each power tool		(b) Demonstrates safe use practices		(b) Demonstrates entry-level safety practices
		(c) Demonstrates correct handling of each hand tool				(c) Lists required basic equipment and tool maintenance
		(d) Identifies correct cleaning technique for each item				(d) Performs basic maintenance tasks
		(e) Demonstrates correct use of measuring tools				(e) Evaluates own performance
		(f) Identifies correct storage locations for each item of equipment and tools				
		(g) Demonstrates safe use practices				
10.2.1	<u>Blueprint Reading</u>	10.2.1 <u>Blueprint Reading</u>	10.2.1 <u>Blueprint Reading</u>	10.2.1 <u>Blueprint Reading</u>	10.2.1 <u>Blueprint Reading</u>	
		(a) Identifies the purpose of sketches and technical drawings		(a) Selects a project and draws to scale		(a) Uses technical drawings and blueprints in project work
		(b) Identifies drawings: • sketches • floor plans • site plans • details • orthographic projections • isometric drawings		(b) Produces a blueprint or Identifies procedures for making a blueprint		(b) Evaluates own performance
		(c) Identifies purpose of blueprints in industry		(c) Interprets simple blueprints		
		(d) Identifies procedure for drawing to scale				
		(e) Produces simple technical drawings and sketches				

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10.2.2 <u>General Piping</u>	10.2.2 <u>General Piping</u> (a) Identifies the pipe trades (b) Identifies terms related to pipe trades (c) Identifies different types of pipes (d) Identifies uses of each type of pipe (e) Identifies standard pipe sizes and lengths (f) Identifies procedure for taking and reading pipe measurements (g) Demonstrates tubing bending techniques (h) Demonstrates pipe cutting techniques (i) Demonstrates pipe threading techniques (j) Identifies types of pipe hangers and their uses (k) Identifies purposes and types of solder and flux (l) Demonstrates soldering copper tubing joints (m) Identifies procedure for cutting and joining plastic pipe (n) Demonstrates acceptable safety practices	10.2.2 <u>General Piping</u> (a) Takes and records pipe measurements (b) Cuts pipe to acceptable standards (c) Threads pipe to acceptable standards (d) Bends pipe and tubing to acceptable standards (e) Demonstrates soldering of different metals (f) Identifies basic principles of a plumbing system (g) Identifies basic principles of water service (h) Demonstrates acceptable safe use practices	10.2.2 <u>General Piping</u> (a) Demonstrates ability to cut and join pipe to entry-level standards (b) Identifies non-destructive testing procedures (c) Demonstrates entry-level ability to use rigging (d) Demonstrates entry-level safety practices (e) Evaluates own performance
10.2.3 <u>Gasfitting</u>	10.2.3 <u>Gasfitting</u> (a) Identifies gasfitting as a pipe trade (b) Defines and describes related terms: • BTUs • natural gas • propane gas • fuel oil (c) Demonstrates safety awareness related to gasfitting	10.2.3 <u>Gasfitting</u> (a) Identifies and lists safety practices specific to gasfitters (b) Identifies and lists prohibited practices (c) Identifies procedures to connect gas pipe	10.2.3 <u>Gasfitting</u> (a) Demonstrates correct care and use of tools (b) Demonstrates ability to cut, bend and join pipe to entry-level standards (c) Recognizes the characteristics of a gas flame

Level 16Level 26Level 36

(d) Identifies control systems and valves used by gasfitters

(d) Demonstrates ability to identify, operate and replace simple controls:

- room thermostats
- fan switches
- safety switches
- 100% shut off valves

(e) Identifies procedures to connect and disconnect gas pipe and valve to gas source

(e) Demonstrates entry-level safety practices

(f) Demonstrates ability to replace simple components of a gas system

(f) Evaluates own performance

10.2.4 Heating Services

10.2.4 Heating Services

- (a) Demonstrates entry-level ability to identify components and controls of a heating system
- (b) Demonstrates ability to read and adjust residential heating controls

10.2.4 Heating Services

- (a) Lists the major parts and components of a heating system
- (b) Demonstrates entry-level ability to perform basic maintenance on a heating system

10.2.4 Heating Services

- (a) Identifies conventional heating systems:
 - forced air
 - hot water
 - steam
- (b) Identifies non-conventional heating systems:
 - electrical
 - wood burning stoves and fireplaces
 - coal burning stoves
 - solar—active
 - solar—passive
- (c) Lists advantages and disadvantages of each system
- (d) Identifies the major parts of an active solar system
- (e) Identifies the major parts of a passive solar system
- (f) Demonstrates entry-level safety practices
- (g) Evaluates own performance

- (c) Demonstrates entry-level safety practices

- (c) Identifies basic components of steam systems
- (d) Identifies the major parts of a residential hot water heating system
- (e) Identifies types of controls used in heating systems
- (f) Demonstrates ability to safely light and adjust residential heating systems
- (g) Demonstrates basic technique of connecting piping to a heat source

Level 16Level 26Level 36

- (h) Demonstrates basic maintenance procedures
- (i) Demonstrates safe use practices

10.2.5 Electrical Services10.2.5 Electrical Services

- (a) Identifies electrical services as a construction trade
- (b) Defines related terms:
 - direct current
 - alternating current
 - series circuits
 - parallel circuits
 - entertainment systems
 - communication and security systems
 - incandescent lights
 - fluorescent lights
- (c) Identifies and lists sources of electricity

10.2.5 Electrical Services

- (a) Demonstrates ability to replace bulbs, tubes and fuses
- (b) Identifies electrical safety and control devices
- (c) Demonstrates ability to identify and reset breakers
- (d) Demonstrates basic ability to remove, repair and replace switches and outlets safely
- (e) Demonstrates ability to repair an electrical wire and complete a circuit
- (f) Demonstrates ability to test and service smoke detectors
- (g) Identifies cause of power problems
- (h) Identifies and demonstrates basic techniques of house wiring
- (i) Reads and interprets simple electrical blueprints
- (j) Demonstrates safe use practices

10.2.5 Electrical Services

- (a) Demonstrates correct care and use of equipment and tools
- (b) Demonstrates entry-level awareness of electrical terms
- (c) Demonstrates entry-level ability to remove, repair and replace switches and outlets
- (d) Demonstrates entry-level ability to perform basic repairs on electrical appliances
- (e) Demonstrates ability to wire a simple house circuit
- (f) Demonstrates entry-level safety standards
- (g) Demonstrates entry-level troubleshooting and testing procedures
- (h) Evaluates own performance

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10.2.6 <u>Welding</u>	10.2.6 <u>Welding</u> (a) Identifies tasks performed by welders in the construction trade (b) Defines and describes related terms: • welding • oxyacetylene welding • arc welding (c) Lists advantages and disadvantages of welding joints in the construction trade	10.2.6 <u>Welding</u> (a) Identifies and lists safety practices specific to welders (b) Demonstrates use of safety clothing and helmet (c) Identifies various welds: • square edge butt • lap welds • single vee welds (d) Identifies commonly used welding equipment, tools and supplies (e) Demonstrates basic oxyacetylene weld (f) Demonstrates basic arc welding techniques (g) Demonstrates accepted safety practices (h) Demonstrates care and basic maintenance of equipment, tools and supplies	10.2.6 <u>Welding</u> (a) Demonstrates correct care and use of equipment and tools (b) Demonstrates entry-level ability to oxyacetylene weld by fusion only (c) Demonstrates entry-level ability to oxyacetylene weld by adding filler metal (d) Demonstrates entry-level arc welding techniques on mild steel: • cutting • "butt" joints • "T" joints • spot welding (e) Demonstrates entry-level safety practices (f) Evaluates own performance
10.2.7 <u>Insulating Services</u>	10.2.7 <u>Insulating Services</u> (a) Identifies tasks performed by insulators in the construction trade (b) Defines and describes related terms: • insulation • vapour barriers • R factor	10.2.7 <u>Insulating Services</u> (a) Identifies, describes and compares common insulation materials (b) Identifies and describes characteristics of insulation materials: • temperature range • thickness • size • fragility • flexibility • ease of handling • method of installation • safety precautions	10.2.7 <u>Insulating Services</u> (a) Demonstrates ability to conduct entry-level assessment of basic insulation needs (b) Demonstrates entry-level techniques for matching type of insulation to job

Level 16

- (c) Identifies areas of building where insulation is used

Level 26

- (c) Lists and describes basic systems requiring insulation
- (d) Demonstrates ability to match materials to jobs
- (e) Demonstrates basic techniques of insulating for heat and frost (weatherproofing)
- (f) Demonstrates use of insulation fasteners
- (g) Demonstrates safe use practices

Level 36

- (c) Demonstrates entry-level ability to install a plastic vapour barrier and fibre insulation
- (d) Demonstrates basic pipe and duct insulation and fastening
- (e) Demonstrates entry-level safety practices
- (f) Evaluates own performance

10.3	Work Standards	10.3	Work Standards	10.3	Work Standards	10.3	Work Standards
		(a)	Identifies major categories of the building code	(a)	Demonstrates willingness to work to accepted standards in each trade area	(a)	Demonstrates ability to conform to entry-level standards in specific trade area
		(b)	Demonstrates the ability to work to standards set by teacher/supervisor	(b)	Identifies trade area with work standards that match students' abilities	(b)	Demonstrates the ability to interpret and follow the building code
				(c)	Demonstrates the ability to work to standards set by teacher/supervisor	(c)	Evaluates own performance
10.4	Supplies Management	10.4	Supplies Management	10.4	Supplies Management	10.4	Supplies Management
		(a)	Identifies the importance of safe, secure and sanitary supply management practices	(a)	Lists and describes benefits of efficient and effective supply management	(a)	Demonstrates ability to conserve supplies in specific trade area
		(b)	Identifies hazardous materials: • use • warning • storage • disposal • health factors			(b)	Evaluates own performance
		(c)	Identifies WHMIS symbols				
10.5	Work Area Management	10.5	Work Area Management	10.5	Work Area Management	10.5	Work Area Management
		(a)	Identifies the procedures used to care for and manage work areas in each trade	(a)	Lists and describes work area management in specific trades	(a)	Demonstrates leadership and initiative in work area management
		(b)	Maintains a safe, clean work area	(b)	Maintains a safe, clean work area	(b)	Works with others to maintain work area standards
						(c)	Evaluates own performance

INTEGRATED OCCUPATIONAL PROGRAM

OCCUPATIONAL COMPONENT

SCOPE AND SEQUENCE

Occupational Cluster: Creative Arts

Occupational Course: **CRAFTS AND ARTS**

Course Sequence: Crafts and Arts 16–26–36

- Notes:**
1. Crafts and Arts allow students to explore a broad range of artistic areas including drawing, painting, pottery and clothing designs. In addition, an extensive number of optional areas may be explored.
 2. Crafts and Arts 36 focuses on the development of students' ability to engage in entrepreneurial crafts and arts activities.
 3. Students indicating strong interest and ability in crafts and arts should be encouraged to take a combination of courses including Technical Arts, Fashion and Fabric Services, Hair Care and Esthetology.

GENERAL OBJECTIVES

1. To develop students' personal and interpersonal skills.
2. To develop students' awareness of opportunities and employment conditions in crafts and arts industries.
3. To develop students' knowledge and skills in a range of crafts and arts.
4. To enable students to obtain employment in a related occupation and/or to articulate with another secondary program or post-secondary institution for further education.

		<u>Level 16</u>		<u>Level 26</u>		<u>Level 36</u>	
10. WORK SKILLS							
10.1 Identification							
10.1.1	Job Scope	10.1.1	Job Scope	10.1.1	Job Scope	10.1.1	Job Scope
		(a)	Identifies the scope of the crafts and arts industry	(a)	Lists and describes potential jobs in crafts and arts field	(a)	Determines major area of interest
		(b)	Identifies and describes basic skills common to crafts and arts: • commercial art • fine art • crafts • technical arts: – drawing – painting – carving – pottery – designing – creating	(b)	Identifies local job opportunities for entrepreneurship	(b)	Demonstrates ability to market area(s) of interest
				(c)	Identifies and describes "cottage industries"	(c)	Identifies and describes role of creative arts in society
10.1.2	Equipment, Tools and Supplies	10.1.2	Equipment, Tools and Supplies	10.1.2	Equipment, Tools and Supplies	10.1.2	Equipment, Tools and Supplies
		(a)	Identifies and names equipment and tools commonly used in crafts and arts	(a)	Lists and describes major equipment and tools commonly used in crafts and arts	(a)	Identifies and lists major suppliers of related materials in community

		<u>Level 16</u>		<u>Level 26</u>		<u>Level 36</u>	
		(b)	Identifies safe use practices of equipment, tools and supplies	(b)	Lists and describes supply items required for specific crafts and arts	(b)	Identifies and records condition of equipment and tools
				(c)	Demonstrates safe use practices	(c)	Identifies and records service needs of equipment and tools
10.2	Equipment, Tools and Supplies Usage	10.2	Equipment, Tools and Supplies Usage	10.2	Equipment, Tools and Supplies Usage	10.2	Equipment, Tools and Supplies Usage
		(a)	Demonstrates correct handling of all equipment and tools	(a)	Demonstrates ability to maintain and store all items	(a)	Demonstrates entry-level use of appropriate equipment, tools and supplies
		(b)	Demonstrates correct handling of supplies	(b)	Demonstrates safe use practices	(b)	Demonstrates entry-level safety practices
		(c)	Identifies shelf life and storage areas for all items			(c)	Evaluates own performance
		(d)	Identifies safe use practices				
10.2.1	<u>Drawing</u>	10.2.1	<u>Drawing</u>	10.2.1	<u>Drawing</u>	10.2.1	<u>Drawing</u>
		(a)	Defines "drawing" and "design"	(a)	Demonstrates ability to produce creative drawings using: • pencil • pen and ink • charcoal • chalk	(a)	Demonstrates ability to perform basic lettering
		(b)	Identifies and uses common basic drawing/design techniques	(b)	Demonstrates ability to use the basic elements of design	(b)	Demonstrates ability to draw two views of the human form
		(c)	Identifies and demonstrates a variety of line properties: • static • moving • expressive	(c)	Demonstrates basic drawing techniques: • contour drawing • model drawing	(c)	Identifies the principles of layout and design for poster and sign making
		(d)	Identifies and uses dot-design drawing technique: • line • line and dot • shading • texture	(d)	Demonstrates ability to sketch the human form	(d)	Evaluates own performance
		(e)	Defines and describes "form" and "shape"	(e)	Understands the uses of calligraphy		
		(f)	Draws simple views of various parts of the human body: • head • hands • feet	(f)	Identifies and uses techniques and materials for basic lettering		

Level 16Level 26Level 36

- (g) Draws, sketches forms/still life
- (h) Identifies and demonstrates perspective in drawing
- (i) Identifies and demonstrates basic size design conversion:
 - grid techniques
- (j) Produces a project drawing

10.2.2 Painting10.2.2 Painting

- (a) Identifies and describes "colour" and "light"
- (b) Identifies and describes the uses and effects of colour
- (c) Identifies primary, secondary, tertiary colours
- (d) Produces a basic colour chart showing colour relationships
- (e) Identifies types of paints
- (f) Identifies and demonstrates "wash" techniques
- (g) Produces a water colour

10.2.2 Painting

- (a) Identifies and describes:
 - shade/colour tint
 - value/intensity
 - colour temperature
 - colour wheel
- (b) Identifies the nature and uses of acrylic paints
- (c) Demonstrates use of paints to create design
- (d) Demonstrates "cast a shadow" techniques
- (e) Produces a minimum of one water colour and one acrylic project

10.2.2 Painting

- (a) Describes the major elements of composition
- (b) Demonstrates the uses of poster painting as an advertising medium
- (c) Designs and paints a poster
- (d) Demonstrates creativity in the use of paint and various painting techniques
- (e) Produces a minimum of two paintings
- (f) Evaluates own work

10.2.3 Sculpturing10.2.3 Sculpturing

- (a) Identifies and describes common sculpturing materials and techniques:
 - wood
 - stone
 - metal
 - card stock
 - clay
 - leather
 - lino

10.2.3 Sculpturing

- (a) Demonstrates ability to use sculpturing equipment, tools and supplies safely

10.2.3 Sculpturing

- (a) Demonstrates ability to produce sculpture

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
	(b) Identifies and describes uses of sculptured products (c) Demonstrates basic sculpturing techniques (d) Produces a sculptured project	(b) Demonstrates ability to sculpture in a minimum of three materials (c) Produces usable/saleable sculptured projects	(b) Demonstrates appropriate entry-level ability for work in sculpturing environments (c) Evaluates own work
10.2.4 <u>Ceramics</u>	10.2.4 <u>Ceramics</u> (a) Identifies and describes the use of clay in art, crafts and society (b) Identifies and describes major tools and equipment used in ceramics (c) Identifies the basic processes used in ceramics: • hand building • wheel throwing (d) Produces a ceramic project (e) Demonstrates safe use practices	10.2.4 <u>Ceramics</u> (a) Demonstrates ability to use ceramic production equipment, tools and supplies (b) Demonstrates ability to produce simple ceramics by: • hand building • wheel throwing • moulding (c) Demonstrates basic ability to use glazes and paints (d) Identifies firing methods (e) Demonstrates safe use practices	10.2.4 <u>Ceramics</u> (a) Demonstrates creativity in production of ceramics (b) Demonstrates skills of displaying and marketing of ceramic products (c) Demonstrates appropriate entry-level ability for work in ceramic production (d) Evaluates own work
10.2.5 <u>Textile Arts</u>	10.2.5 <u>Textile Arts</u> (a) Identifies the basic methods of textile production (b) Identifies common techniques used for textile production in crafts: • plaiting • weaving • knotting • knitting • hooking (c) Identifies and describes cloth enhancement techniques: • stitchery • batik • painting • silkscreen	10.2.5 <u>Textile Arts</u> (a) Demonstrates ability to perform a minimum of three textile production techniques (b) Demonstrates ability to perform textile enhancement techniques (c) Experiments with weaving	10.2.5 <u>Textile Arts</u> (a) Demonstrates ability to produce textile products (b) Demonstrates ability to display or market textile products (c) Demonstrates appropriate entry-level skills for work in craft/textile production

Level 16

- (d) Produces a simple textile
- (e) Enhances a textile

Level 26

- (d) Identifies and produces usable/saleable textile products

Level 36

- (d) Evaluates own work

10.2.6 Paper Art10.2.6 Paper Art

- (a) Identifies uses of paper in crafts and arts
- (b) Identifies common techniques of paper modelling and designing:
- papier-mâché
 - paper flowers
 - origami
 - paper designing
 - découpage
- (c) Identifies paper enhancement techniques:
- book covers
 - wallpaper

10.2.6 Paper Art

- (a) Demonstrates ability to produce a minimum of two paper model/design projects
- (b) Demonstrates ability to perform paper enhancement techniques
- (c) Produces usable/saleable paper-made projects

10.2.6 Paper Art

- (a) Demonstrates ability to produce paper products
- (b) Demonstrates ability to display and market paper-made products
- (c) Demonstrates appropriate entry-level ability
- (d) Evaluates own work

10.2.7 Options10.2.7 Options

Native, ethnic, cultural and other local craft and art forms may be developed in this unit and/or integrated into previous units. Some possibilities are:

- basket making
- beadwork
- cartooning
- candle making
- crochet
- embroidery
- etching
- glass art
- ikebana
- iron work
- jewellery making
- knitting
- leather crafts
- macramé
- mosaics/tile
- decorating
- needlepoint
- petit point
- psanke
- puppet making
- quilting
- rug making
- shoe repair
- toy making
- wood carving
- wood block printing

Students should be encouraged to explore a broad range of crafts and arts options

10.2.7 Options

Students should be encouraged to orient their skill and creative development toward a limited number of crafts and arts forms

10.2.7 Options

Students should be encouraged to prepare themselves for the workplace and/or seek placement in a program providing further training in related areas

<u>Level 16</u>			<u>Level 26</u>			<u>Level 36</u>		
10.3	Work Standards	10.3	Work Standards	10.3	Work Standards	10.3	Work Standards	
		(a)	Identifies public standards of crafts and arts appreciation	(a)	Identifies and describes standards of performance and production appropriate to the field of crafts and arts	(a)	Demonstrates work standards appropriate to the workplace and/or marketplace	
		(b)	Identifies personal standards in various crafts and arts	(b)	Works to given standards	(b)	Evaluates own performance	
10.4	Supplies Management	10.4	Supplies Management	10.4	Supplies Management	10.4	Supplies Management	
		(a)	Identifies process of arts and crafts supply management	(a)	Demonstrates appropriate supply management practices	(a)	Demonstrates entry-level supply management techniques	
		(b)	Practices safe, secure and appropriate supply use and management	(b)	Identifies crafts and arts supply companies	(b)	Evaluates own performance	
10.5	Work Area Management	10.5	Work Area Management	10.5	Work Area Management	10.5	Work Area Management	
		(a)	Identifies and uses appropriate procedures of work area management in arts and crafts	(a)	Demonstrates effective work area management	(a)	Demonstrates leadership and initiative	
		(b)	Maintains a safe, clean work area	(b)	Maintains a safe, clean work area	(b)	Works with others to maintain a safe, clean work area	
						(c)	Evaluates own/team performance	

INTEGRATED OCCUPATIONAL PROGRAM

OCCUPATIONAL COMPONENT

SCOPE AND SEQUENCE

Occupational Cluster: Creative Arts

Occupational Course: **TECHNICAL ARTS**

Course Sequence: Technical Arts 16–26–36

- Notes:**
1. Technical Arts allows students to explore a broad range of technical and arts related occupations. The primary focus is in the area of graphic arts and visual communication. In addition, students may have the opportunity to explore and develop skills in related areas, including audio-visual equipment and computer designing.
 2. Level 16 focuses on equipment and task identification and demonstration of basic photographic processes.
 3. Level 26 focuses on photographic composition, darkroom techniques, planning and production of a graphics product, media arts lighting, set construction and audio-visual equipment use.
 4. Level 36 focuses on production of displays and demonstration of previous skills to entry-level standards.
 5. Students indicating strong interest and abilities in one or more of the technical arts should be encouraged to take a combination of courses including Crafts and Arts, Art and Drafting.

GENERAL OBJECTIVES

1. To develop students' personal and interpersonal skills.
2. To develop students' awareness of opportunities and employment conditions in the area of technical arts.
3. To develop students' knowledge and skills in one or more areas of the technical arts.
4. To enable students to obtain employment in a related occupation and/or to articulate with another secondary program or post-secondary institution for further education.

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10. WORK SKILLS			
10.1 Identification			
10.1.1 Job Scope	10.1.1 Job Scope	10.1.1 Job Scope	10.1.1 Job Scope
	(a) Identifies the scope of the technical arts field: • photography • graphic arts • computer design • television arts • audio-visuals • set construction	(a) Lists and describes potential jobs in the technical arts	(a) Determines major area(s) of interest
	(b) Identifies and describes the basic skills common to the technical arts: • working with equipment • working with tools • using creativity	(b) Identifies local job opportunities	(b) Performs a job search for an entry-level position in an area of interest
			(c) Identifies local entrepreneurial opportunities in technical arts

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10.1.2 Equipment, Tools and Supplies Content of this unit will vary and be dependent upon the instructional areas to be taught in school and/or in the community. The course may focus on at least two of the following occupational areas: Photographic Arts • photography • film processing • photographic enhancing Graphic Arts • machine handling • printing Media Arts • audio-visual equipment handling • TV equipment handling.	10.1.2 Equipment, Tools and Supplies (a) Identifies equipment used in the technical arts (b) Identifies and names common hand tools used in related areas (c) Identifies and names common power tools used in the technical arts (d) Identifies safe use practices with equipment, tools and supplies	10.1.2 Equipment, Tools and Supplies (a) Lists and describes major equipment, tools and supplies commonly used in occupational areas (b) Lists and describes safe use practices	10.1.2 Equipment, Tools and Supplies (a) Identifies and lists suppliers of related materials (b) Identifies condition and maintenance needs of equipment and tools
10.2 Equipment, Tools and Supplies Usage	10.2 Equipment, Tools and Supplies Usage	10.2 Equipment, Tools and Supplies Usage	10.2 Equipment, Tools and Supplies Usage
10.2.1 General	10.2.1 General (a) Demonstrates correct handling of equipment and tools (b) Demonstrates correct handling of supplies (c) Identifies storage areas (d) Demonstrates safe use practices	10.2.1 General (a) Demonstrates ability to use, clean and replace all items to correct storage area (b) Demonstrates safe use practices	10.2.1 General (a) Demonstrates entry-level use of appropriate equipment and tools (b) Demonstrates basic maintenance tasks on equipment and tools (c) Demonstrates entry-level safety practices

Level 1610.2.2 Photographic Arts

This unit may be taught alone or in conjunction with the graphic arts unit and/or with the media arts unit.

Community partnership activities may include learning experiences in a photographic studio, film processing plant, fast-film processing centre.

10.2.2 Photographic Arts

- (a) Identifies specific entry-level skills related to photography:
 - film processing
 - developing
 - printing
 - enlarging
- (b) Composes and shoots assigned subjects
- (c) Identifies basic uses of a darkroom
- (d) Demonstrates interest and ability to perform related tasks:
 - follows directions
 - handles film correctly
 - operates a 35 mm camera
 - loads film
 - processes black and white film
 - makes contact prints
 - uses an enlarger
- (e) Demonstrates safe use practices

Level 2610.2.2 Photographic Arts

- (a) Demonstrates continued skill development in related areas and tasks:
 - loads, adjusts, uses a variety of cameras
 - prepares to operate a process camera
 - operates a process camera
 - processes film
 - prepares and mounts slides
- (b) Lists and describes the procedures for portrait photography

Level 3610.2.2 Photographic Arts

- (a) Demonstrates entry-level skills in the photographic arts
- (b) Presents a photographic display of own work using basic layout, design and presentation techniques

<u>Level 16</u>		<u>Level 26</u>		<u>Level 36</u>
10.2.3 <u>Graphic Arts</u>	10.2.3 <u>Graphic Arts</u>	10.2.3 <u>Graphic Arts</u>	10.2.3 <u>Graphic Arts</u>	10.2.3 <u>Graphic Arts</u>
This unit may include instruction in use of process camera, basic silk screen, and basic layout and design processes where appropriate. Similarly, equipment handling may include instruction on industrial machines: offset printer, industrial duplicators, facsimile machines, typesetting machines, and/or basic office/business equipment: duplicators, thermal transparency makers, overhead projectors, word processors, computers.	(a) Identifies specific entry-level skills related to a variety of graphic arts jobs: • lettering • calligraphy • poster making • equipment care • machine tending (b) Demonstrates interest and ability to perform related tasks: • follows directions • operates equipment • performs basic maintenance (c) Demonstrates safe use practices	(a) Demonstrates continued interest and skill development in related tasks and areas and specifically in printing: • uses correct terminology • classifies type into groups, series, families and fonts • measures type • operates a typesetting machine (as available) • demonstrates basic layout and design skills • demonstrates correct and safe equipment use (b) Demonstrates entry-level safety practices (c) Evaluates own performance	(a) Demonstrates entry-level skills in one or more related areas (b) Demonstrates entry-level safety practices (c) Evaluates own performance	
10.2.4 <u>Media Arts</u>	10.2.4 <u>Media Arts</u>	10.2.4 <u>Media Arts</u>	10.2.4 <u>Media Arts</u>	10.2.4 <u>Media Arts</u>
This unit may include instruction in the context of: • video or television production • basic operations and care of common audio-visual equipment • theatrical, studio, stage and set construction.	(a) Identifies equipment use and skills related to: • audio-visual equipment handling (b) Demonstrates safe use practices	(a) Demonstrates interest and skill development in related tasks and areas: • audio-visual equipment handling • TV/video camera assistant • lighting assistant (b) Demonstrates interest and ability to perform related tasks: • follows directions • uses basic hand and power tools correctly • connects power and lighting equipment • performs simple repairs • works as a team member • operates audio-visual equipment	(a) Demonstrates entry-level skills in media arts (b) Demonstrates entry-level safety practices	

Level 16

Level 26

Level 36

- (c) Demonstrates safe use practices

- (c) Produces and presents a slide tape or other media presentation
(d) Evaluates own performance

- A. Stage Lighting:
- demonstrates correct and safe use of equipment
 - uses correct terminology
 - demonstrates basic knowledge of reflection, refraction of light/colour
 - describes function of stage/photo-graphic lighting
 - identifies and describes different types of stage/photographic lighting:
 - striplights
 - spotlights
 - projectors
 - special effects
- B. Audio-visual Equipment
- demonstrates correct and safe use of equipment (as available):
 - tape-recorder
 - overhead projector
 - video recorder/camera
 - videodisc
 - record player
 - amplifiers
 - speakers
 - 16 mm projectors
 - microphones
- C. Set Construction
- demonstrates correct and safe use of tools and equipment
 - works with a variety of set construction materials:
 - wood
 - styrofoam
 - plastic
 - paint
 - textiles
 - metals
 - wire
 - plaster
 - papier-mâché

		<u>Level 16</u>		<u>Level 26</u>		<u>Level 36</u>	
10.3	Work Standards	10.3	Work Standards	10.3	Work Standards	10.3	Work Standards
		(a)	Identifies accepted work standards in each technical art area	(a)	Identifies and describes standards of performance and production appropriate to interest area(s) in technical arts	(a)	Demonstrates the ability to work to entry-level standards
		(b)	Completes tasks to set standards	(b)	Works to teacher's/ supervisor's standards	(b)	Evaluates own performance
10.4	Supplies Management	10.4	Supplies Management	10.4	Supplies Management	10.4	Supplies Management
		(a)	Identifies process of supply management in selected areas of technical arts	(a)	Demonstrates appropriate supply management practices	(a)	Demonstrates entry-level supply management techniques
		(b)	Practises safe, secure and appropriate supply use and management	(b)	Identifies local suppliers	(b)	Evaluates own performance
10.5	Work Area Management	10.5	Work Area Management	10.5	Work Area Management	10.5	Work Area Management
		(a)	Identifies and uses appropriate procedures of work area management in each technical arts area	(a)	Demonstrates effective work area management	(a)	Demonstrates entry-level skills in work area management
		(b)	Maintains a safe, clean work area			(b)	Works with others to maintain work area
						(c)	Evaluates task performance

INTEGRATED OCCUPATIONAL PROGRAM

OCCUPATIONAL COMPONENT

SCOPE AND SEQUENCE

Occupational Cluster: Natural Resources

Occupational Course: **NATURAL RESOURCE SERVICES**

Course Sequence: Natural Resource Services 16–26–36

- Notes:**
1. Natural Resource Services is a composite course that focusses on entry-level skill development for the oil and gas, forestry and mining industries.
 2. Dependent upon local needs and the presence of one or more of the three natural resource industries, schools may wish to focus on only one or two of the three occupational areas covered in this curriculum.
 3. Schools considering offering Natural Resource Services may wish to use community partners for many of the concept and skill development components.
 4. Level 16 focuses on identification of equipment and basic tasks in each branch of Natural Resource Services.
 5. Level 26 focuses on practising basic tasks and tool and equipment use.
 6. Level 36 focuses on demonstrating tasks to entry-level standards.
 7. To obtain a broader spectrum of related job skills, students may be encouraged to take Agricultural Production and/or Automotive Services and/or Warehouse Services.

GENERAL OBJECTIVES

1. To develop students' personal and interpersonal skills.
2. To develop students' awareness of opportunities and working conditions in natural resources industries.
3. To develop students' knowledge and skills in one or more of the industries involved in natural resource development.
4. To enable students to obtain employment in a related occupation and/or to articulate with another secondary program or post-secondary institution for further education.

		<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>			
10. WORK SKILLS							
10.1 Identification							
10.1.1	Job Scope	10.1.1	Job Scope	10.1.1	Job Scope		
		(a)	Identifies three major branches of the natural resource industry: • oil and gas • forestry • mining and quarrying	(a)	Lists and describes the major branches of the natural resource industry	(a)	Identifies natural resource industry of primary interest
		(b)	Identifies the entry-level jobs in each area of the natural resource industry	(b)	Identifies and lists natural resource industries in community	(b)	Recognizes the need and opportunities for further training in each area
		(c)	Identifies career ladders in each branch of the industry	(c)	Identifies local, related industries	(c)	Conducts a job search for entry-level positions in industry of primary interest

Level 16Level 26Level 36

- (d) Identifies related trades
- (e) Identifies opportunities for full-time and casual employment in each area

10.1.2 Equipment, Tools and Supplies
10.1.2 Equipment, Tools and Supplies

- (a) Identifies and names major equipment commonly used in each of the natural resource industries
- (b) Identifies commonly used hand tools
- (c) Identifies commonly used power tools
- (d) Identifies the safe use practice of each item of equipment and each tool

10.1.2 Equipment, Tools and Supplies

- (a) Lists and describes equipment and tools commonly used by each branch of the industry
- (b) Lists and describes supply items commonly used in each branch of the industry
- (c) Lists each hand tool and describes its safe use practices

10.1.2 Equipment, Tools and Supplies

- (a) Identifies condition of hand and power tools
- (b) Identifies and records maintenance needs of hand and power tools
- (c) Inventories equipment, hand and power tools and supplies used in a local natural resource or related business

10.2 Equipment, Tools and Supplies Usage
10.2 Equipment, Tools and Supplies Usage

- (a) Demonstrates correct handling of hand tools
- (b) Demonstrates correct handling of power tools
- (c) Demonstrates correct use of basic measuring tools
- (d) Identifies correct storage location for each item

10.2 Equipment, Tools and Supplies Usage

- (a) Demonstrates ability to use, clean and replace equipment and tools to correct storage place
- (b) Demonstrates safe use practices of equipment, tools and supplies

10.2 Equipment, Tools and Supplies Usage

- (a) Demonstrates entry-level skills with:
 - hand tools
 - common power tools
- (b) Performs basic maintenance tasks on hand and power tools
- (c) Demonstrates safe use practices of equipment, tools and supplies
- (d) Evaluates own performance

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10.2.1 Oil and Gas Industry	10.2.1 Oil and Gas Industry	10.2.1 Oil and Gas Industry	10.2.1 Oil and Gas Industry
10.2.1.1 <u>Leasehand</u>	10.2.1.1 <u>Leasehand</u>	10.2.1.1 <u>Leasehand</u>	10.2.1.1 <u>Leasehand</u>
Field experiences at the Grades 11 and 12 levels may be focused in one or more of the three natural resource areas.	(a) Identifies tasks performed by a leasehand (b) Demonstrates ability to load and unload supplies and equipment (c) Demonstrates correct stacking and storing techniques (d) Recognizes hazard symbols and labels (e) Identifies the basic techniques of fence building (f) Identifies the techniques of digging trenches and ditches (g) Identifies heavy-duty equipment used in the oil and gas industry	(a) Lists and describes tasks performed by a leasehand (b) Demonstrates safe handling procedures for loading and unloading materials (c) Demonstrates safe handling procedures for stacking and storing materials (d) Demonstrates ability to build fences (e) Demonstrates ditch and trench digging (f) Demonstrates safe practices (g) Assists with operation of equipment	(a) Demonstrates entry-level skills of a leasehand (b) Demonstrates safe practices in each task area (c) Demonstrates willingness to perform other assigned tasks (d) Demonstrates willingness to look, listen and learn (e) Participates in a Hydrogen Sulfide Alert Training Program (f) Demonstrates safe use practices (g) Evaluates own performance
10.2.1.2 <u>Floorhand</u>	10.2.1.2 <u>Floorhand</u>	10.2.1.2 <u>Floorhand</u>	10.2.1.2 <u>Floorhand</u>
	(a) Identifies tasks performed by floorhand (b) Identifies tasks completed on the rig floor (c) Identifies the techniques for connecting/disconnecting pipe (d) Identifies the purpose and use of "tongs" (e) Identifies the process of "tripping"	(a) Lists and describes tasks performed by a floorhand (b) Demonstrates the use of "tongs" (c) Demonstrates ability to screw/unscrew drill pipe connections—"tripping" (d) Demonstrates safe use practices	(a) Demonstrates basic knowledge of floorhand duties (b) Demonstrates safe practices in each task area (c) Demonstrates willingness to perform other assigned tasks (d) Demonstrates willingness to look, listen and learn (e) Passes a floorman training certification course (f) Passes a defensive driving course (g) Participates in an oilfield maintenance certificate program (h) Evaluates own performance

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10.2.1.3 <u>Derrickhand</u>	10.2.1.3 <u>Derrickhand</u> (a) Identifies tasks performed by a derrickhand (b) Identifies safe work practices (c) Identifies process of guiding pipe (d) Identifies process for steadying pipe during connection (e) Identifies the nature and purpose of mud	10.2.1.3 <u>Derrickhand</u> (a) Lists and describes tasks performed by a derrickhand (b) Demonstrates competency in climbing and working in high places (c) Demonstrates awareness of techniques used to guide and steady pipe (d) Identifies the duties related to tending pumps (e) Demonstrates ability to perform general maintenance tasks (f) Recognizes the controls used to assess mud quality (g) Identifies the procedure for recording mud quality	10.2.1.3 <u>Derrickhand</u> (a) Demonstrates basic knowledge and skills of a derrickhand (b) Demonstrates safe practices in each task area (c) Demonstrates willingness to perform other assigned tasks (d) Demonstrates awareness of mud quality controls and techniques (e) Demonstrates ability to complete mud quality reports (f) Demonstrates ability to work with others (g) Evaluates own performance
10.2.2 Forestry Industry	10.2.2 Forestry Industry	10.2.2 Forestry Industry	10.2.2 Forestry Industry
10.2.2.1 <u>Forestry Crew Worker</u>	10.2.2.1 <u>Forestry Crew Worker</u> (a) Identifies tasks performed by a crew worker (b) Defines the following terms: • ecology • compassing • timber • seeding • planting • silviculture (c) Identifies bush survival (woodsmanship) techniques (d) Identifies safe use and care of power equipment (e) Identifies special safety practices in forestry (f) Demonstrates ability to plant seedlings	10.2.2.1 <u>Forestry Crew Worker</u> (a) Lists and describes tasks performed by a crew worker (b) Demonstrates basic woodsmanship (c) Demonstrates safe use and care of hand and power tools (d) Demonstrates ability to drive a snowmobile, a four-wheel drive vehicle, and an all-terrain vehicle (e) Demonstrates ability to use a compass (f) Participates in communication training (radio operator's licence)	10.2.2.1 <u>Forestry Crew Worker</u> (a) Demonstrates basic skills of a crew worker (b) Passes a defensive driving course (c) Passes a radio operator's licence course (d) Participates in campsite construction (e) Demonstrates basic ability to fight forest fires (f) Demonstrates entry-level duties performed by survey crew workers

Level 16Level 26Level 36

- (g) Identifies tasks performed by survey crew workers
- (h) Identifies tasks performed by forestry firefighters
- (i) Identifies tasks performed in campsite construction

- (g) Demonstrates safe practices in all tasks
- (h) Demonstrates ability to work with others
- (i) Evaluates own performance

10.2.3 Mining and Quarrying Industry

10.2.3 Mining and Quarrying Industry

10.2.3 Mining and Quarrying Industry

10.2.3 Mining and Quarrying Industry

10.2.3.1 Miner and Quarrier

10.2.3.1 Miner and Quarrier

10.2.3.1 Miner and Quarrier

10.2.3.1 Miner and Quarrier

- (a) Identifies tasks performed by entry-level workers in the industry
- (b) Demonstrates ability and temperament to work in the industry:
 - surface worker
 - underground worker
- (c) Demonstrates ability to handle common hand and power tools
- (d) Identifies special equipment used in mining and quarrying operations:
 - above ground
 - below ground
- (e) Identifies resources obtained from mines and quarries
- (f) Identifies special safety practices in mining and quarrying

- (a) Demonstrates ability to perform high energy manual tasks
- (b) Demonstrates basic ability to use and control hydraulic machines and hoses
- (c) Demonstrates basic ability to operate cutting and handling machines
- (d) Demonstrates ability to load and unload materials
- (e) Demonstrates safe practices in all areas

- (a) Demonstrates ability appropriate to entry-level jobs in the industry
- (b) Demonstrates willingness to listen, look and learn
- (c) Demonstrates entry-level safe practices
- (d) Demonstrates ability to work with others
- (e) Evaluates own performance

10.3 Work Standards

10.3 Work Standards

10.3 Work Standards

10.3 Work Standards

- (a) Identifies work standards appropriate to each industry and each group of jobs
- (b) Maintains standards set by teacher/supervisor

- (a) Demonstrates willingness to work to accepted standards in each area
- (b) Maintains standards set by teacher/supervisor

- (a) Demonstrates ability to conform to entry-level standards in specific job areas
- (b) Evaluates own performance

Level 16Level 26Level 36**10.4 Supplies Management**

- 10.4 Supplies Management**
- (a) Identifies importance of safe, secure and sanitary supply management

- 10.4 Supplies Management**
- (a) Lists and describes benefits of efficient and effective supply management
 - (b) Recognizes the purpose and process of an inventory

- 10.4 Supplies Management**
- (a) Demonstrates ability to use and conserve supplies
 - (b) Evaluates own performance

10.5 Work Area Management

- 10.5 Work Area Management**
- (a) Identifies procedures to care for and manage work areas in different job areas
 - (b) Recognizes the need for a safe work area
 - (c) Maintains a safe work area

- 10.5 Work Area Management**
- (a) Lists and describes work area management in different job areas
 - (b) Maintains a safe work area

- 10.5 Work Area Management**
- (a) Demonstrates leadership and initiative
 - (b) Works with others to maintain standards
 - (c) Maintains a safe work area
 - (d) Evaluates own performance

INTEGRATED OCCUPATIONAL PROGRAM

OCCUPATIONAL COMPONENT

SCOPE AND SEQUENCE

Occupational Cluster: Personal and Public Services

Occupational Course: **CHILD AND HEALTH CARE SERVICES**

Course Sequence: Child and Health Care Services 16–26–36

GENERAL OBJECTIVES

- Notes:**
1. Level 16 focuses on career field introduction, baby-sitter skills, basic adult care tasks and human needs.
 2. Level 26 focuses on life cycle changes, child care, adult home services and the human body.
 3. Level 36 focuses on refining skills, reviewing ethical concerns and personal viewpoints.

1. To develop students' personal and interpersonal skills.
2. To develop students' awareness of opportunities and working conditions in the personal services field.
3. To develop students' knowledge and skills in the basic care of children and the basic care of the sick, the aged and the infirm.
4. To enable students to obtain employment in a related occupation and/or to articulate with another secondary program or post-secondary institution for further education.

		<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10. WORK SKILLS				
10.1 Identification				
10.1.1 Job Scope	10.1.1 Job Scope	(a) Identifies the jobs related to child and health care: • residential aide • nursing assistant • baby-sitter • day-care assistant (b) Describes child and health care services	(a) Lists and categorizes related jobs available in the community (b) Describes the major characteristics of: • child care • health care	(a) Identifies the opportunities for personal growth and development within the related areas (b) Demonstrates the ability to relate specific actions to either child care or health care
10.1.2 Roles and Responsibilities	10.1.2 Roles and Responsibilities	(a) Identifies the roles and responsibilities of each related job (b) Identifies the personal qualities required for each related job; e.g., sensitivity to needs of people from various cultures	(a) Lists and describes roles and responsibilities of each related job	(a) Identifies a related job of primary interest (b) Lists the roles and responsibilities of primary interest job

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10.1.3 <u>Life Cycle</u>	10.1.3 <u>Life Cycle</u> (a) Describes the life cycle (b) Identifies the major stages in the life cycle (c) Identifies the terms: • pediatrics • geriatrics	10.1.3 <u>Life Cycle</u> (a) Lists and describes people's needs at each stage of the life cycle (b) Identifies the concept of hierarchy of need (c) Identifies the needs of: • infants (1–18 months) • toddlers (19–36 months) • preschoolers (3–5 years) • school-age (6–12 years) • teenage (13–19 years)	10.1.3 <u>Life Cycle</u> (a) Explains the needs of people at each major stage of their life cycle (b) Compares and contrasts the needs of pediatrics with geriatrics
10.2 <u>Equipment, Tools and Supplies Usage</u>	10.2 <u>Equipment, Tools and Supplies Usage</u>	10.2 <u>Equipment, Tools and Supplies Usage</u>	10.2 <u>Equipment, Tools and Supplies Usage</u>
10.2.1 <u>Child Care Safety</u>	10.2.1 <u>Child Care Safety</u> (a) Identifies safety regulations related to children's: • toys • clothing • cribs • car seats • food products (b) Identifies toiletry, diapers and other baby care products (c) Identifies what makes a child's toy, clothing, crib and other products safe	10.2.1 <u>Child Care Safety</u> (a) Lists and describes safety regulations related to children's manufactured products (b) Lists and compares cost and quality of special children's toiletries (c) Identifies safety-in-the-home measures when young children are present (d) Identifies related consumer guides	10.2.1 <u>Child Care Safety</u> (a) Demonstrates to children safe use of products (b) Demonstrates use of related consumer guides (c) Evaluates own performance
10.2.2 <u>First Aid</u>	10.2.2 <u>First Aid</u> (a) Identifies basic first aid practices (b) Participates in a recognized first aid course	10.2.2 <u>First Aid</u> (a) Demonstrates: • basic first aid • CPR (b) Passes a recognized first aid course	10.2.2 <u>First Aid</u> (a) Demonstrates ability to respond to emergencies and perform cardiopulmonary resuscitation (b) Upgrades first aid qualifications

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
	(c) Identifies health safety precautions, practices and standards (d) Identifies the use of fire, police, ambulance and other local emergency telephone numbers	(c) Lists health safety precautions, practices and standards	(c) Demonstrates ability to follow health safety precautions, practices and standards (d) Evaluates own performance
10.2.3 <u>Child Care Principles</u>	10.2.3 <u>Child Care Principles</u> (a) Identifies the basic principles of child care: • physical health • emotional health • mental health (b) Identifies the stages of normal child growth and development: • physical • mental • social (c) Identifies behaviour stages of children (d) Identifies the attitudes considered appropriate for child care workers: • safety consciousness • respect and care for children • sanitation consciousness • positive self-image (e) Identifies and recognizes signs of child abuse	10.2.3 <u>Child Care Principles</u> (a) Lists and describes factors relating to the physical, emotional and mental health of children (b) Identifies, lists and describes the physical appearance of children at various ages: • at birth • one week • one month • six months • eighteen months (c) Discusses how self-concept develops (d) Identifies: • legislation relating to child abuse • legal rights and responsibilities	10.2.3 <u>Child Care Principles</u> (a) Demonstrates an awareness of the basic principles of child care (b) Demonstrates an awareness of the basic principles of child development (c) Recognizes the causes of genetic and birth defects: • genes • mongolism • Rh problems • hemophilia

Level 16Level 26Level 36

- (f) Identifies the ethics of baby-sitting:
- reliability
 - punctuality
 - enjoys children
 - personal cleanliness
 - positive role model
 - good personal health
 - well-mannered
 - businesslike
 - takes pride in work
- (g) Identifies the role of play in the life of a child

10.2.4 Practical Child Care

10.2.4 Practical Child Care

- (a) Identifies the routine tasks performed by baby-sitters:
- heats formulas
 - prepares snacks
 - feeds infant
 - feeds child
 - changes diapers
- (b) Demonstrates ability to perform routine tasks
- (c) Identifies procedures for coping with emergencies:
- emergency phone numbers
 - fire safety/exit routes
 - emergency contact persons
 - first aid
 - coping with callers
- (d) Identifies safe practices while baby-sitting:
- inspects for hazards
 - no friends
 - no smoking
 - no strangers
 - no unlocked doors
 - follows instructions
 - limits television watching
 - plays quiet games
 - reads non-violent stories
- (e) Identifies safe practices for going home

10.2.4 Practical Child Care

- (a) Lists and describes:
- safe baby-sitting practices
 - how to cope with emergencies
- (b) Demonstrates effective child care while baby-sitting
- (c) Identifies and prepares basic foods suitable for children (1 month to 10 years)
- (d) Demonstrates game playing with toddlers
- (e) Defines "parenting"

10.2.4 Practical Child Care

- (a) Maintains a record of baby-sitting jobs performed
- (b) Requests letters of reference from parents of babies cared for
- (c) Demonstrates correct baby-sitting practices
- (d) Operates/works in a school or community baby-sitting service
- (e) Evaluates own performance

Level 16

- (f) Passes a baby-sitter's safety course
- (g) Identifies and demonstrates use of books, games and toys suitable for:
- infants (1–18 months)
 - toddlers (19–36 months)
 - preschoolers (3–5 years)
 - school-age (6–10 years)
- (h) Creates a game for a 5-year-old

Level 26

- (f) Identifies and lists local day-care centres
- (g) Investigates and describes the activities in a local day-care or after hours centre

Level 36

- (f) Demonstrates entry-level ability to prepare meals appropriate for children of different ages (1 month to 10 years)
- (g) Describes and demonstrates the process of "child-proofing" a room
- (h) Describes appropriate "reading" material for a 5-year-old
- (i) Discusses the topic: "What are the characteristics of effective parenting?"
- (j) Demonstrates effective parenting skills
- (k) Discusses the importance of parenting in child care and development
- (l) Discusses the impact of day-care attendance on child development

10.2.5 Adult Basic Health Care10.2.5 Adult Basic Health Care

- (a) Identifies basic types of adult health care services, jobs:
- residential aides
 - institutional aides
 - private, part-time aides
- (b) Identifies major functions of an aide:
- encourages person's independence
 - respects person's rights and responsibilities
 - assists person to meet basic needs

10.2.5 Adult Basic Health Care

- (a) Recognizes common conditions of the elderly or disabled adult
- (b) Communicates in a positive manner

10.2.5 Adult Basic Health Care

- (a) Demonstrates entry-level abilities to provide adults with assistance in daily living
- (b) **OPTIONS**
Demonstrates the ability to perform special tasks on instructions from medical authorities:
- provides special foot care
 - assists with oxygen giving equipment

Level 16

- (c) Practises hygiene and sanitation:
 - personal
 - public
 - patient
- (d) Identifies lifting and transferring procedures for immobile persons
- (e) Identifies correct lifting techniques
- (f) Demonstrates the basic care of a wheelchair-bound person
- (g) Identifies the basic activities required to assist with daily living:
 - mouth care
 - nail care
 - hair care
 - facial grooming
 - dressing
 - bowel and bladder evacuations
 - basic exercises

Level 26

- (c) Recognizes the difference between physical and mental infirmities
- (d) Demonstrates correct techniques of lifting and transferring
- (e) Demonstrates ability to perform aids to daily living:
 - body care and functions
 - dressing assistance
 - grooming
 - exercise assistance
- (f) Takes, reads and records body temperature
- (g) Identifies special tasks that need to be performed when caring for elderly and/or immobile persons
- (h) Defines "palliative" care
- (i) Identifies the vital signs

Level 36

- (c) Explores and describes feelings about aging, death and dying
- (d) Recognizes the grieving process
- (e) Assists with palliative care
- (f) Evaluates own performance

10.2.6 Home Duties10.2.6 Home Duties

- (a) Recognizes homemaking duties to be performed

10.2.6 Home Duties

- (a) Makes an unoccupied bed
- (b) Makes an occupied bed
- (c) Demonstrates ability to use bed support devices
- (d) Demonstrates ability to perform a bed bath
- (e) Demonstrates ability to perform a back rub

10.2.6 Home Duties

- (a) Maintains a safe, sanitary home environment
- (b) Maintains a caring, pleasing home environment
- (c) Assists homebound person with recreational interests
- (d) Evaluates own performance

Level 16Level 26Level 3610.2.7 Anatomy and Physiology10.2.7 Anatomy and Physiology

- (a) Defines the terms "anatomy" and "physiology"
- (b) Names the major systems of the body
- (c) Defines "body organ" and "body tissue"

10.2.7 Anatomy and Physiology

- (a) Identifies the major organs that form each body system

10.2.7 Anatomy and Physiology

- (a) Identifies two diseases that may be associated with each major system of the body

10.2.8 Nutrition10.2.8 Nutrition

- (a) Defines "nutrition"
- (b) Recognizes the need for a well-balanced diet
- (c) Identifies the four food groups
- (d) Identifies basic types of approved special diets

10.2.8 Nutrition

- (a) Describes the role of proper nutrition for the very young and very old
- (b) Identifies guides for preparing children's meals; e.g., *Canada's Food Guide*
- (c) Describes the four major food groups:
 - milk
 - meat
 - cereal
 - fruit
- (d) Identifies preparation procedures and content of special diets

10.2.8 Nutrition

- (a) Lists foods that may be prepared for:
 - cardiovascular illness
 - no-salt diets
 - high fibre diets
 - balanced fluid diets
 - high protein/high energy diets
 - dental soft diets
 - food allergies
- (b) Demonstrates ability to prepare selected diet meals

10.3 **Work Standards**10.3 **Work Standards**

- (a) Identifies municipal and provincial standards/regulations for:
 - day-care centres
 - residential aides
- (b) Performs tasks to standards

10.3 **Work Standards**

- (a) Identifies and describes standards for:
 - day-care centres
 - nursing homes
- (b) Identifies problems related to standards in child and health care

10.3 **Work Standards**

- (a) Identifies the procedures for opening and operating a:
 - day-care
 - baby-sitting service
 - residential aide service
- (b) Describes the standards that must be used in a care giving operation

Level 16Level 26Level 36

10.4	Supplies Management	10.4	Supplies Management (a) Identifies how supply items are managed in child and health care operations: • hazardous • non-hazardous (b) Identifies common supply items found in child and health care operations	10.4	Supplies Management (a) Describes supply management practices used in a local child or health care facility	10.4	Supplies Management (a) Demonstrates appropriate supply management techniques (b) Evaluates own performance
10.5	Work Area Management	10.5	Work Area Management (a) Identifies the techniques of maintaining a safe, sanitary and pleasant working environment	10.5	Work Area Management (a) Describes the routine operations of keeping a child or health care facility safe, sanitary and pleasant	10.5	Work Area Management (a) Demonstrates the ability to maintain a facility that meets the needs of those receiving care (b) Demonstrates leadership and initiative (c) Evaluates own performance

INTEGRATED OCCUPATIONAL PROGRAM

OCCUPATIONAL COMPONENT

SCOPE AND SEQUENCE

Occupational Cluster: Personal and Public Services

Occupational Course: **ESTHETOLOGY**

Course Sequence: Esthetology 16–26–36

- Notes:**
1. Esthetology 16–26–36 is designed for students who are interested in the personal grooming occupations. This sequence of courses enables students to select from a number of related jobs.
 2. Students indicating a strong interest in the personal grooming occupations should be encouraged to take the Hair Care sequence in addition to the Esthetology sequence.

GENERAL OBJECTIVES

1. To develop students' personal and interpersonal skills.
2. To develop students' awareness of opportunities and employment conditions in the personal services, personal grooming industry.
3. To develop students' knowledge and skills in the field of esthetology—facial and nail care—and in related jobs.
4. To enable students to obtain employment in a related occupation and/or to articulate with another secondary program or post-secondary institution for further education.

Level 16

Level 26

Level 36

10. WORK SKILLS

10.1 Identification

10.1.1 Job Scope

10.1.1 Job Scope

- (a) Identifies the scope of related jobs:
- beauty advisor
 - cosmetic sales
 - beauty shop assistant
 - beauty product representative
 - manicurist
 - pedicurist
 - make-up artist
 - cosmetician
 - entrepreneur

10.1.1 Job Scope

- (a) Describes and lists the knowledge and skills required for each related job
- (b) Identifies types of esthetology operations available in the community
- (c) Recognizes advantages and disadvantages of being an esthetologist

10.1.1 Job Scope

- (a) Identifies jobs of major interest
- (b) Identifies local job opportunities in major area of interest

<u>Level 16</u>		<u>Level 26</u>		<u>Level 36</u>			
10.1.2	Equipment, Tools and Supplies	10.1.2	Equipment, Tools and Supplies (a) Identifies and describes major items of grooming equipment and tools used in esthetology (b) Locates storage for major items of equipment, tools and supplies	10.1.2	Equipment, Tools and Supplies (a) Takes inventory of major items: • equipment • tools • supplies (b) Returns equipment, tools and supplies to correct storage areas (c) Identifies the components and cost of a basic kit	10.1.2	Equipment, Tools and Supplies (a) Identifies and records condition of equipment and tools
10.2	Body Systems and Structures	10.2	Body Systems and Structures	10.2	Body Systems and Structures	10.2	Body Systems and Structures
10.2.1	<u>The Skin</u>	10.2.1	<u>The Skin</u> (a) Identifies basic structure and function of the skin (b) Describes the function of the upper layer of the skin	10.2.1	<u>The Skin</u> (a) Identifies and describes major structures and functions of skin (b) Identifies and describes: • skin lesions • skin disorders • skin diseases (c) Identifies types of skin (d) Recognizes treatable/non-treatable skin conditions (e) Lists and describes nature of treatments for treatable skin conditions	10.2.1	<u>The Skin</u> (a) Labels a diagram of basic structures of the skin (b) Demonstrates treatments for treatable skin conditions (c) Demonstrates ability to identify skin types and makes suggestions for treatment of skin conditions
10.2.2	<u>Facial Structures</u>	10.2.2	<u>Bones of the Face</u> (a) Identifies the major bones of the head, face and neck (b) Locates major bones of the face	10.2.2	<u>Muscles and Nerves of the Face</u> (a) Identifies the major muscles of the face and neck: • forehead • eye area • nasal area • mouth area (b) Recognizes the function of nerves	10.2.2	<u>Bones, Muscles and Nerves of the Face</u> (a) Labels a diagram with the major bones and muscles of the face and neck (b) Describes the function of facial nerves

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
	(c) Describes why knowledge of facial bones, muscles and nerves is necessary	(c) Recognizes the relationship between body systems/ structures and massage	
10.2.3 <u>Facial/Body Shapes</u>	10.2.3 <u>Facial/Body Shapes</u> (a) Defines terms related to facial shapes (b) Identifies basic facial shapes (c) Identifies characteristics of each basic facial shape (d) Identifies facial proportions (e) Describes the meaning of "balance" in facial proportions (f) Identifies and describes the "ideal" facial shape	10.2.3 <u>Facial/Body Shapes</u> (a) Defines terms related to facial profiles (b) Identifies characteristics of basic facial profiles (c) Describes cosmetic techniques used to achieve balance in facial proportion (d) Identifies cosmetic techniques used to minimize and maximize facial features	10.2.3 <u>Facial/Body Shapes</u> (a) Identifies and describes an individual's: • body shape • facial shape • facial profile • facial proportions (b) Identifies and records suggested techniques to achieve: • facial balance • "ideal" facial shape • maximized features • minimized features
10.3 Equipment, Tools and Supplies Usage	10.3 Equipment, Tools and Supplies Usage	10.3 Equipment, Tools and Supplies Usage	10.3 Equipment, Tools and Supplies Usage
10.3.1 <u>Draping</u>	10.3.1 <u>Draping</u> (a) Uses appropriate procedure to prepare patron prior to draping (b) Identifies appropriate draping process	10.3.1 <u>Draping</u> (a) Demonstrates patron preparation prior to draping (b) Demonstrates draping for a facial	10.3.1 <u>Draping</u> (a) Demonstrates appropriate client contact when preparing to drape a customer (b) Evaluates own performance
10.3.2 <u>Facial Care</u>	10.3.2 <u>Facial Care</u> (a) Identifies basic stages of facial care	10.3.2 <u>Facial Care</u> (a) Lists and describes basic stages of facial care	10.3.2 <u>Facial Care</u> (a) Identifies and records skin types

Level 16

Cleansing

- (a) Identifies purpose of cleansing the face
- (b) Identifies methods of cleansing the face
- (c) Demonstrates facial cleansing:
 - surface cleansing
 - deep cleansing
- (d) Identifies products used for deep cleansing

Toning

- (a) Identifies the procedure used to tone the face
- (b) Defines and describes basic massage movements
- (c) Demonstrates basic massage movements

Nourishing

- (a) Identifies and describes the moisturizing process

Level 26

Cleansing

- (a) Lists and describes common products used for:
 - surface cleansing
 - deep cleansing
- (b) Identifies skin types:
 - oily
 - dry
 - combination
- (c) Applies deep cleansing agents
- (d) Removes deep cleansing agents

Toning

- (a) Lists reasons for massaging the face
- (b) Describes the purpose of emollients
- (c) Applies an emollient
- (d) Demonstrates the basic massage movements
- (e) Applies hot/cold towels
- (f) Applies astringent/toner

Nourishing

- (a) Lists reasons for moisturizing
- (b) Applies moisturizer

Level 36

Cleansing

- (a) Demonstrates cleansing of skin:
 - surface cleansing
 - deep cleansing
- (b) Selects and prepares supplies for cleansing different types of skin
- (c) Demonstrates use of facial masks and facial scrubs

Toning

- (a) Demonstrates facial massage:
 - selects equipment, tools and supplies
 - drapes patron
 - performs manipulation
 - applies hot/cold towels
 - applies astringent/toner
- (b) Identifies and describes functions of astringents/toners

Nourishing

- (a) Demonstrates ability to identify skin type and select appropriate nourishing agent

Level 16

Protecting

- (a) Describes the purposes of makeup
- (b) Identifies basic makeup cosmetics
- (c) Identifies basic implements used to apply makeup

Level 26

Protecting

- (a) Recognizes how to match cosmetics to skin colour
- (b) Selects and applies makeup:
 - foundation
 - eye makeup
 - blushes
 - lipstick
 - powder

Level 36

Protecting

- (a) Demonstrates ability to perform a complete makeup application
- (b) Demonstrates makeup techniques for:
 - day wear
 - evening wear
 - special events

Facial Service

- (a) Demonstrates ability to provide complete facial service
- (b) Maintains sanitary conditions throughout service
- (c) Evaluates own performance at each stage of facial care procedure

10.3.3 Eyebrow Arching

10.3.3 Eyebrow Arching

- (a) Identifies arching as a complementary service
- (b) Explains purpose of eyebrow arching

10.3.3 Eyebrow Arching

- (a) Lists supplies and equipment required for arching
- (b) Describes different eyebrow styles
- (c) Uses pencil to outline eyebrows
- (d) Uses tweezers to arch eyebrows
- (e) Identifies alternative arching methods

10.3.3 Eyebrow Arching

- (a) Identifies, selects and prepares an eyebrow arching trolley
- (b) Demonstrates alternative arching methods:
 - waxing
 - hot
 - cold
- (c) Maintains sanitary conditions throughout service
- (d) Evaluates own performance

10.3.4 False Lashes

10.3.4 False Lashes

- (a) Identifies false lash application as a complementary service

10.3.4 False Lashes

- (a) Describes the function/effects of lash applications
- (b) Applies false eyelashes

10.3.4 False Lashes

- (a) Identifies types of false lashes in local supply houses
- (b) Demonstrates application of individual lashes and strip lashes
- (c) Observes sanitary procedures
- (d) Evaluates own performance

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10.3.5 <u>Facial Design</u>	10.3.5 <u>Facial Design</u> (a) Discusses the relationship between personality and facial appearance	10.3.5 <u>Facial Design</u> (a) Uses facial outline to practise facial designs	10.3.5 <u>Facial Design</u> (a) Demonstrates ability to customize facial designs (b) Evaluates own performance
10.3.6 <u>Manicure</u>	10.3.6 <u>Manicure</u> (a) Defines manicure (b) Describes the nail (c) Identifies major parts of the nail (d) Recognizes basic nail shapes: • female • male (e) Performs a plain manicure: • prepares manicure table • identifies tools and supplies • files nails to shape • cleans nails • pushes back cuticle • applies nail polish (f) Uses sanitary practices	10.3.6 <u>Manicure</u> (a) Labels a diagram of the nail and its surrounding tissues (b) Identifies and describes common nail disorders and diseases (c) Identifies and describes salon treatments for nail disorders (d) Recognizes treatable and non-treatable conditions (e) Performs oil manicures (f) Maintains sanitary practices throughout a manicure	10.3.6 <u>Manicure</u> (a) Demonstrates complete preparation and performance of basic manicures (b) Identifies and describes the process of hand and arm massage as a complementary service (c) Defines hand and arm massage (d) Recognizes and names parts of the nail and its surrounding tissues (e) Demonstrates use of hand waxing equipment and supplies (f) Ensures that sanitary practices are followed throughout a manicure
10.3.7 <u>Nail Repair/Replacement</u>	10.3.7 <u>Nail Repair/Replacement</u> (a) Identifies nail repair as a complementary service	10.3.7 <u>Nail Repair/Replacement</u> (a) Demonstrates the process of nail repair	10.3.7 <u>Nail Repair/Replacement</u> (a) Identifies and describes a nail repair process (b) Identifies and describes nail replacement processes: • full nails • tips (c) Demonstrates nail repair and replacement (d) Uses safe and sanitary practices

	Level 16	Level 26	Level 36
10.3.8 <u>Nail Art</u>	10.3.8 <u>Nail Art</u> (a) Identifies nail art as a complementary service	10.3.8 <u>Nail Art</u> (a) Identifies and describes supplies used in nail art (b) Demonstrates basic nail art (c) Designs creative nail art	10.3.8 <u>Nail Art</u> (a) Demonstrates design and application of nail art (b) Applies strips, jewels and other materials to enhance nail appearance
10.3.9 <u>Pedicure</u>	10.3.9 <u>Pedicure</u>	10.3.9 <u>Pedicure</u> (a) Defines meaning of pedicure procedure (b) Identifies tools (c) Selects and sets up tools (d) Identifies steps in pedicure	10.3.9 <u>Pedicure</u> (a) Demonstrates basic pedicure technique
10.3.10 <u>Salesmanship</u>	10.3.10 <u>Salesmanship</u> (a) Identifies importance of sales and service in the grooming industry	10.3.10 <u>Salesmanship</u> (a) Describes the types of services and sales performed by esthetologists (b) Performs sales activities	10.3.10 <u>Salesmanship</u> (a) Identifies the characteristics of effective salespersons (b) Demonstrates appropriate sales activities
10.3.11 <u>Reception Duties</u>	10.3.11 <u>Reception Duties</u>	10.3.11 <u>Reception Duties</u>	10.3.11 <u>Reception Duties</u> (a) Appreciates the responsibilities of a receptionist (b) Demonstrates entry-level receptionist abilities (c) Demonstrates ability to act as a receptionist
10.4 Work Standards	10.4 Work Standards (a) Identifies related sanitary regulations (b) Identifies methods of infection control used in professional salons	10.4 Work Standards (a) Demonstrates personal and public hygiene practices (b) Demonstrates correct use of wet and dry sterilizers	10.4 Work Standards (a) Demonstrates entry-level standards in each task area (b) Evaluates own performance
10.5 Supplies Management	10.5 Supplies Management (a) Identifies appropriate supply management strategies: • inventory control • storage • security	10.5 Supplies Management (a) Identifies local suppliers of professional grooming products (b) Lists major products available from each local supplier	10.5 Supplies Management (a) Demonstrates entry-level supply management skills (b) Evaluates own performance

Level 16Level 26Level 36**10.6 Work Area Management****10.6 Work Area Management**

- (a) Describes appropriate work area management procedures
- (b) Practises work area management
- (c) Recognizes need for ongoing care and maintenance of equipment, tools and facilities

10.6 Work Area Management

- (a) Lists and prepares a schedule of care and maintenance duties

10.6 Work Area Management

- (a) Demonstrates leadership and initiative in work area management
- (b) Evaluates own performance

INTEGRATED OCCUPATIONAL PROGRAM

OCCUPATIONAL COMPONENT

SCOPE AND SEQUENCE

Occupational Cluster: Personal and Public Services

Occupational Course: **FASHION AND FABRIC SERVICES**

Course Sequence: Fashion and Fabric Services 16–26–36

- Notes:**
1. Fashion and Fabric Services explores the area of fashion merchandising and sales and the area of fabric care and cleaning.
 2. Students indicating strong interest in fashion merchandising and sales should be encouraged to take a combination of courses, including Business Services, Esthetology and Hair Care.
 3. Level 16 focuses on identification of the skills, equipment and tools used in fashion and fabric services.
 4. Level 26 focuses on basic skills demonstration.
 5. Level 36 focuses on task performance to entry-level standards.

GENERAL OBJECTIVES

1. To develop students' personal and interpersonal skills.
2. To develop students' awareness of opportunities and employment conditions in the personal services industries.
3. To develop students' knowledge and skills in the area of fashion merchandising, fabric care and cleaning, garment repairs and alterations.
4. To enable students to obtain employment in a related occupation and/or to articulate with another secondary program or post-secondary institution for further education.

Level 16

Level 26

Level 36

10. WORK SKILLS

10.1 Identification

10.1.1 Job Scope

10.1.1 Job Scope

- (a) Identifies the range of jobs in the fashion and fabric services industry
- (b) Identifies the skills required in each of the two major job areas:
 - fashion merchandising
 - fabric care and cleaning

10.1.1 Job Scope

- (a) Lists and describes jobs in the fashion and fabric services industry
- (b) Identifies the local job opportunities in each area
- (c) Lists the knowledge and skills required by workers in each area of the industry

10.1.1 Job Scope

- (a) Identifies and lists the fashion stores and services in the local community
- (b) Identifies and lists the fabric care and cleaning businesses in the local community
- (c) Identifies area of major interest

10.1.2 Equipment, Tools and Supplies

10.1.2 Equipment, Tools and Supplies

- (a) Identifies the major equipment, tools and supplies used in the fashion merchandising industry:
 - mannequins
 - models
 - display materials
 - sales centres

10.1.2 Equipment, Tools and Supplies

- (a) Identifies the parts and functions of the sewing machine

10.1.2 Equipment, Tools and Supplies

- (a) Demonstrates confidence using a sewing machine to perform simple operations

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
	(b) Identifies the major equipment, tools and supplies used in the fabric care and cleaning industry: • sewing machines • sewing supplies • cleaning machines • cleaning solvents (c) Identifies and uses metric measures	(b) Identifies basic care and maintenance techniques of sewing machines (c) Identifies the parts and functions of a serger (d) Identifies parts and function of a blind hemmer	(b) Describes standard care and maintenance duties of basic fashion and fabric equipment (c) Designs a sewing project (d) Uses a serger (e) Uses a blind hemmer
10.1.3 <u>Fashion</u>	10.1.3 <u>Fashion</u>	10.1.3 <u>Fashion</u>	10.1.3 <u>Fashion</u>
	(a) Describes the concept of fashion (b) Identifies recent fashion trends (c) Identifies the influences on fashion	(a) Identifies and records local trends in fashion (b) Describes the effects of advertising on fashion	(a) Describes how local fashion stores promote fashion trends (b) Recognizes the cyclical nature of fashion trends (c) Describes the effect of fashion on the economy
10.1.4 <u>Fashion and Form</u>	10.1.4 <u>Fashion and Form</u>	10.1.4 <u>Fashion and Form</u>	10.1.4 <u>Fashion and Form</u>
	(a) Defines and describes "fashion merchandising" (b) Identifies occupational areas in the industry: • colour draping • fashion and accessory sales • fashion/wardrobe advisors • models • window dressers • fashion buyers • seamstresses (c) Identifies parts of the body that are related to changes in the fashion industry: • head • face • feet • torso • legs	(a) Recognizes the procedure to perform colour draping (b) Identifies, lists and describes fashion accessories (male/female): • shoes • hosiery • handbags • belts • ties • scarves • jewellery • glasses • hats (c) Discusses and describes the components of good grooming/sense of fashion	(a) Performs basic colour draping service (b) Demonstrates basic ability to colour coordinate fashions and accessories (c) Demonstrates a sense of shape and form in fashion selection and coordination for men and women

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
	(d) Identifies and describes the major areas of the body (e) Demonstrates ability to take and record body measurements using a tape measure (f) Identifies and records the colours of the seasons	(d) Describes fashion techniques that maximize and/or minimize various body shapes (male/female) (e) Identifies the concepts of "shape" and "form"	(d) Evaluates own performance
10.1.5 <u>Fashion Sales</u>	10.1.5 <u>Fashion Sales</u>	10.1.5 <u>Fashion Sales</u>	10.1.5 <u>Fashion Sales</u>
	(a) Identifies and lists characteristics of a good fashion salesperson (b) Identifies the components of "eye appeal" displays (c) Identifies types of fashion displays: • racks • mannequins • windows • models (d) Identifies and lists characteristics of successful models (male/female) (e) Recognizes competitive environment in the industry (f) Defines and describes: • poise • charm • features • confidence (g) Describes the concept "The Total Look"	(a) Lists and records the strengths and weaknesses of different types of fashion displays (b) Discusses and demonstrates "point-of-sale" fashion sales and service (c) Identifies basic procedures for dealing with customers (d) Demonstrates correct procedures for packaging and presenting merchandise to customers (e) Demonstrates appropriate bill-writing, credit and cash handling techniques (f) Recognizes fashion sales persons as fashion models (g) Demonstrates skills related to modelling and sales: • poise • charm • confidence • grooming • dress	(a) Demonstrates entry-level ability to sell fashions (b) Demonstrates awareness of various types of fashion merchandising (d) Demonstrates basic mannequin dressing techniques (e) Creates a fashion "window dressing" (f) Works with others to plan and present a "total look" fashion show (g) Describes and demonstrates the basic principles of fashion modelling (h) Evaluates own/team's performance

Level 16Level 26Level 3610.2 **Equipment, Tools and Supplies Usage**10.2 **Equipment, Tools and Supplies Usage**10.2 **Equipment, Tools and Supplies Usage**10.2 **Equipment, Tools and Supplies Usage**10.2.1 Fabrics10.2.1 Fabrics

- (a) Identifies fabrics by fibre type:
 - natural: cotton, wool, silk
 - synthetic: polyester, acrylic, rayon
- (b) Identifies fabrics by their construction weaves
- (c) Identifies and compares fibre performance, durability
- (d) Identifies content and care symbols on garments
- (e) Identifies appropriate care and cleaning methods for natural and synthetic fibres

10.2.1 Fabrics

- (a) Lists and describes major types of fibres
- (b) Matches fibres to appropriate methods of care and cleaning
- (c) Describes content and care symbols on garments
- (d) Creates and sews a basic garment

10.2.1 Fabrics

- (a) Identifies and describes the qualities of novel materials:
 - leathers
 - ultrasuede
- (b) Identifies fabrics by fibre type and fibre weave
- (c) Identifies appropriate care and cleaning method for each common fibre type

10.2.2 Fabric Care10.2.2 Fabric Care

- (a) Identifies the major parts of the fabric care process:
 - cleaning—wet/dry
 - repairing
 - restoring
- (b) Identifies types of cleaning solvents:
 - petroleum
 - synthetic
- (c) Identifies safe use practices with cleaning solvents
- (d) Identifies different types of stains
- (e) Demonstrates spotting techniques

10.2.2 Fabric Care

- (a) Identifies the operation of a cleaning plant
- (b) Identifies and uses cleaning equipment
- (c) Identifies safety regulations related to use of steam
- (d) Identifies and describes the wet cleaning process
- (e) Recognizes types and uses of wet cleaning fluids:
 - acids
 - alkalis
 - bleaches

10.2.2 Fabric Care

- (a) Performs basic spot cleaning on identified stains
- (b) Correctly uses a steam cleaner
- (c) Assists with wet cleaning processes
- (d) Demonstrates entry-level ability to receive and distribute garments
- (e) Identifies and tags garments:
 - dry cleaning
 - shirt laundry

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
	(f) Identifies procedure for dye testing	(f) Identifies "problem" fabrics, materials	(f) Demonstrates ability to: • write invoices • handle cash/credit • assemble orders for delivery
	(g) Spots stains correctly	(g) Identifies procedure for receiving and distributing garments to customers: • reception process • distribution process	(g) Demonstrates safe use practices
		(h) Demonstrates safe use practices	(h) Evaluates own performance
10.2.3 <u>Garment Repair</u>	10.2.3 <u>Garment Repair</u>	10.2.3 <u>Garment Repair</u>	10.2.3 <u>Garment Repair</u>
	(a) Demonstrates ability to sew by hand	(a) Demonstrates basic tasks on a sewing machine: • threads the machine • fills bobbins • adjusts machine tension • uses adjuster-dial (if available) to produce varied stitches	(a) Demonstrates basic ability to replace zippers
	(b) Demonstrates ability to handle sewing shears	(b) Designs and makes a stitch sampler	(b) Performs simple repairs using needle and thread
	(c) Performs simple repairs using needle and thread	(c) Demonstrates basic competency on the sewing machine: • sews straight lines • follows a guide/baste • sews seams • attaches zipper to fabric • zigzag stitches • cuffs and tapers pants and slacks	(c) Demonstrates care and safe use practices on equipment, tools and fabrics
	(d) Demonstrates ability to replace buttons by hand sewing	(d) Demonstrates basic ability to sew arm patches	(d) Evaluates own performance
	(e) Demonstrates basic sewing techniques: • measuring • marking • pinning/basting	(e) Correctly uses a sewing machine to perform simple repairs	
		(f) Demonstrates ability to perform minor garment repairs	
		(g) Demonstrates care and respect for tools, equipment and materials	

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10.2.4 <u>Consumer Awareness</u>	10.2.4 <u>Consumer Awareness</u> (a) Identifies the "quality characteristics" of clothes" (b) Identifies the factors affecting price of clothes (c) Recognizes the difference between "needs" and "wants" (d) Defines the concept "Buyer Beware"	10.2.4 <u>Consumer Awareness</u> (a) Discusses how advertising affects consumers (b) Lists and records typical seasonal clothes purchases (c) Calculates average costs of purchasing by cash and by credit (d) Discusses the merits of cash versus credit purchases to: • shop owners • purchasers (e) Identifies techniques for recycling clothes: • shortening • lengthening • mix and match • accessorizing	10.2.4 <u>Consumer Awareness</u> (a) Identifies and compares cost of credit from: • banks • bank cards • department stores (b) Discusses "truth in advertising" as applied to the fashion industry (c) Demonstrates basic techniques of recycling clothes (d) Recognizes opportunities in clothes recycling/next-to-new business
10.3 Work Standards	10.3 Work Standards (a) Identifies work standards appropriate to two major areas of the fashion industry: • fashion merchandising • fabric care and cleaning	10.3 Work Standards (a) Demonstrates willingness and potential to work to accepted standards in one or both major areas of the fashion industry	10.3 Work Standards (a) Demonstrates ability to conform to entry-level standards in major interest area (b) Evaluates own performance
10.4 Supplies Management	10.4 Supplies Management (a) Identifies the importance of safe, secure and sanitary supply management (b) Uses safe, secure and sanitary supply management practices	10.4 Supplies Management (a) Lists and describes benefits of efficient and effective supply management	10.4 Supplies Management (a) Demonstrates safe practices and supply conservation (b) Evaluates own performance

Level 16Level 26Level 36

10.5	Work Area Management	10.5	Work Area Management	10.5	Work Area Management	10.5	Work Area Management
		(a)	Identifies work area management procedures: • fashion merchandising • fabric care and cleaning	(a)	Lists and describes work area management in each major job classification	(a)	Demonstrates leadership and initiative
						(b)	Works with others to maintain standards
						(c)	Evaluates own/team's performance

INTEGRATED OCCUPATIONAL PROGRAM

OCCUPATIONAL COMPONENT

SCOPE AND SEQUENCE

Occupational Cluster: Personal and Public Services

Occupational Course: **HAIR CARE**

Course Sequence: Hair Care 16–26–36

- Notes:**
1. Hair Care 16–26–36 is designed for students who are interested in working with human/non-human hair goods and products. A wide range of occupations would be available to graduates.
 2. Students indicating a strong interest in the personal grooming occupations should be encouraged to take the Esthetology sequence in addition to the Hair Care sequence.
 3. Students showing superior abilities may be transferred to the Beauty Culture 12–22–32 sequence.

GENERAL OBJECTIVES

1. To develop students' personal and interpersonal skills.
2. To develop students' awareness of opportunities and employment conditions in the personal services, personal grooming industry.
3. To develop students' knowledge and skills in the care of hair, hair goods and related products.
4. To enable students to obtain employment in a related occupation and/or to articulate with another secondary program or post-secondary institution for further education.

Level 16

Level 26

Level 36

10. WORK SKILLS

10.1 Identification

10.1.1 Job Scope

10.1.1 Job Scope

- (a) Identifies the scope of related jobs:
 - beauty advisor
 - beauty product representative
 - cosmetic sales
 - entrepreneur
 - receptionist
 - salon assistant
 - wig dresser
 - wig sales

10.1.1 Job Scope

- (a) Describes and lists the knowledge and skills required for related jobs
- (b) Describes related career ladders
- (c) Investigates local job and career opportunities

10.1.1 Job Scope

- (a) Identifies jobs/career paths of major interest in the hair care industry
- (b) Identifies local job/career opportunities in area of major interest

10.1.2 Equipment, Tools and Supplies

10.1.2 Equipment, Tools and Supplies

- (a) Identifies major items of grooming equipment and tools

10.1.2 Equipment, Tools and Supplies

- (a) Describes major equipment, tools and supplies

10.1.2 Equipment, Tools and Supplies

- (a) Identifies and records condition of major equipment items and tools

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
	(b) Locates the storage areas for equipment, tools and supplies	(b) Takes inventory of major items: • equipment • tools • supplies (c) Calculates the cost of purchasing a basic kit	
10.1.3 <u>Product Knowledge</u>	10.1.3 <u>Product Knowledge</u> (a) Identifies hair care products: • home use • professional use	10.1.3 <u>Product Knowledge</u> (a) Selects appropriate products for individual needs	10.1.3 <u>Product Knowledge</u> (a) Describes major hair care products (b) Identifies local suppliers of hair care products: • wholesale • retail (c) Compares wholesale and retail prices and calculates profit margins (d) Identifies related products that are or could be sold in grooming/beauty shop areas
10.2 Equipment, Tools and Supplies Usage	10.2 Equipment, Tools and Supplies Usage	10.2 Equipment, Tools and Supplies Usage	10.2 Equipment, Tools and Supplies Usage
10.2.1 <u>Draping</u>	10.2.1 <u>Draping</u> (a) Identifies different draping procedures: • dry service • wet service (b) Determines the appropriate draping for a service	10.2.1 <u>Draping</u> (a) Selects appropriate draping for a service (b) Demonstrates wet and dry draping	10.2.1 <u>Draping</u> (a) Demonstrates entry-level draping skills: • wet service • dry service (b) Uses appropriate procedures to protect client
10.2.2 <u>Hair Setting/Hairstyling</u>	10.2.2 <u>Hair Setting/Hairstyling</u> (a) Describes the procedure used to: • part hair • set hair	10.2.2 <u>Hair Setting/Hairstyling</u> (a) Demonstrates use of combs and brushes to: • create shaping • control hair • finger wave • style	10.2.2 <u>Hair Setting/Hairstyling</u> (a) Demonstrates ability to handle hair: • comb • brush • part • detangle

Level 16

- (b) Identifies the direction of hair flow
- (c) Demonstrates use of combs and brushes to handle hair:
 - detangling
 - directing
 - waving
 - parting
 - shaping
- (d) Demonstrates use of blow-dryers:
 - recognizes controls
 - identifies safe usage
 - dries hair
 - directs hair
- (e) Demonstrates use of blow-dryers in combination with comb and brush:
 - dries hair
 - shapes hair
 - directs hair
- (f) Demonstrates use of rollers and securing clips/pins (on-base technique):
 - combs hair
 - sections hair
 - selects appropriate roller sizes
 - secures with clip/pin
- (g) Demonstrates the use of curling irons to create movements (on-base technique):
 - combs hair
 - sections hair
 - winds hair
- (h) Demonstrates the ability to braid hair:
 - French braid
 - corn-row braid

Level 26

- (b) Demonstrates creation of pin curls:
 - identifies types of curls
 - identifies types of bases
 - makes pin curls:
 - sculpture curls
 - flair curls
 - stand-up curls
 - secures each curl
- (c) Demonstrates use of brush to create a style on set hair:
 - roller set
 - pin curl set
- (d) Demonstrates ability to set and style hair using a blow-dryer, a comb and/or a brush
- (e) Demonstrates ability to braid hair:
 - two-strand braids
 - three-strand braids
 - four-strand flat braiding

Level 36

- (b) Demonstrates ability to set a style using:
 - rollers
 - finger wave
 - blow-dryer and curling iron
 - pin curls
 - braiding
 - combination setting techniques
- (c) Demonstrates ability to style hair using a variety of styling tools and aids:
 - blowers
 - curling irons
 - combs
 - brushes
 - ornaments
- (d) Demonstrates safe use practices
- (e) Evaluates own performance

Level 16Level 26Level 36

- (i) Demonstrates basic comb-out techniques:

Brushing

- uses brush to blend hair
- uses brush to back-brush
- uses brush to style and finish

Combing

- uses comb to blend hair
- uses comb to back-comb
- uses comb to style and finish

10.2.3 Cosmetic Chemistry10.2.3 Cosmetic Chemistry10.2.3 Cosmetic Chemistry

- (a) Defines and describes the meaning of pH
- (b) Identifies the relationship between pH and healthy hair
- (c) Measures the pH of common hair cosmetics
- (d) Identifies the difference between cosmetics and drugs
- (e) Identifies and describes the use of hydrogen peroxide on hair

10.2.3 Cosmetic Chemistry

- (a) Demonstrates ability to use cosmetics/chemicals correctly
- (b) Explains the relationship between pH and hair
- (c) Demonstrates safe use practices
- (d) Evaluates own performance

10.2.4 Hair Cleansing10.2.4 Hair Cleansing

- (a) Identifies related terms
- (b) Identifies types of shampoos
- (c) Matches shampoo to correct function
- (d) Identifies and lists shampoo safety procedures
- (e) Demonstrates ability to:
 - select a shampoo
 - perform a shampoo service
 - comb out hair
 - prepare for hair setting

10.2.4 Hair Cleansing

- (a) Demonstrates proper shampoo procedures
- (b) Demonstrates safe use practices

10.2.4 Hair Cleansing

- (a) Demonstrates ability to shampoo hair
- (b) Demonstrates safe use practices

Level 16

Level 26

Level 36

10.2.5 Hair Rinses

10.2.5 Hair Rinses

- (a) Identifies types of rinses and their functions
- (b) Demonstrates ability to:
 - select appropriate rinse
 - apply acid rinse
 - apply creme rinse

10.2.5 Hair Rinses

- (a) Demonstrates proper selection and application of hair rinses
- (b) Demonstrates safe use practices:
 - protecting client's skin
 - protecting client's clothing

10.2.5 Hair Rinses

- (a) Demonstrates entry-level ability to select and apply hair rinses
- (b) Demonstrates safe use practices

10.2.6 Haircutting

10.2.6 Haircutting

10.2.6 Haircutting

- (a) Identifies related terms
- (b) Identifies haircutting tools:
 - scissors
 - razors
 - clippers
- (c) Defines and describes concept of "elevation"
- (d) Holds hair at proper elevation to style:
 - zero elevation cuts
 - 45° elevation cuts
 - 90° elevation cuts
- (e) Demonstrates ability to follow a basic haircutting pattern
- (f) Demonstrates safe haircutting practices

10.2.6 Haircutting

- (a) Demonstrates simple haircuts on hair goods
- (b) Demonstrates safe haircutting practices

10.2.7 Hair Goods

10.2.7 Hair Goods

10.2.7 Hair Goods

- (a) Identifies types of hair goods:
 - wigs
 - hairpieces
- (b) Identifies reasons for wearing hair goods
- (c) Identifies type of "material" in hair goods
- (d) Sets a hairpiece using rollers and pin curls
- (e) Demonstrates alternative comb-out styles of set hairpiece
- (f) Demonstrates ability to set and comb out a wig:
 - human hair
 - synthetic fibre

10.2.7 Hair Goods

- (a) Demonstrates techniques for colouring wigs
- (b) Demonstrates techniques for measuring patrons for custom-made wigs
- (c) Recognizes the limitations of altering the size of a wig
- (d) Demonstrates care and safe use practices when handling hair goods
- (e) Evaluates own performance

Level 16

Level 26

Level 36

- (g) Demonstrates hair goods cleansing techniques

10.2.8 Hair Analysis

10.2.8 Hair Analysis

10.2.8 Hair Analysis

- (a) Identifies the relationship of hair to the skin

10.2.8 Hair Analysis

- (a) Demonstrates entry-level ability to analyze hair:
- porosity
 - elasticity
 - density
 - colour
 - length
 - type by location

- (b) Identifies types of hair:

- ethnic origin
- body location

- (c) Lists the major structures of hair

- (d) Describes the major functions of hair

- (e) Identifies the major hair analysis categories:

- texture
- elasticity
- porosity

- (f) Analyzes hair according to the three major categories

10.2.9 Diseases and Disorders

10.2.9 Diseases and Disorders

10.2.9 Diseases and Disorders

10.2.9 Diseases and Disorders

- (a) Identifies the basic structure and function of the skin
- (b) Identifies and describes common disorders and diseases of the scalp
- (c) Recognizes treatable and non-treatable skin/scalp/hair conditions

10.2.10 Hair and Scalp Conditioning

10.2.10 Hair and Scalp Conditioning

- (a) Applies conditioners correctly

- (b) Protects patron during conditioning service

10.2.10 Hair and Scalp Conditioning

- (a) Identifies various types of conditioners

- (b) Determines appropriate conditioners to use for different hair and scalp conditions

10.2.10 Hair and Scalp Conditioning

- (a) Demonstrates correct procedures for using hair and scalp conditioners
- (b) Evaluates own performance

<u>Level 16</u>		<u>Level 26</u>	<u>Level 36</u>
10.2.11 <u>Salesmanship</u>	10.2.11 <u>Salesmanship</u>	10.2.11 <u>Salesmanship</u>	10.2.11 <u>Salesmanship</u>
	(a) Presents a positive image in the workplace (b) Identifies the meaning of terms: • salesmanship • service	(a) Describes the characteristics of an effective salesperson (b) Introduces clients to services and products	(a) Identifies and demonstrates sales activities: • providing information • suggestion selling • request selling • display advertising • promotions
10.2.12 <u>Reception Duties</u>	10.2.12 <u>Reception Duties</u>	10.2.12 <u>Reception Duties</u>	10.2.12 <u>Reception Duties</u>
	(a) Identifies reception duties: • customer relations • staff relations • taking appointments • handling/taking stock • answering the telephone • displaying merchandise	(a) Performs basic reception duties: • take appointments • answer telephone • handle cash and credit transactions • display merchandise (b) Maintains good relationships with staff, clients, others	(a) Appreciates the responsibilities of a receptionist (b) Knows the duties of an entry-level receptionist (c) Demonstrates ability to perform reception duties: • relate well to others • project a positive image • answer the telephone • provide product information • book and change appointments • deal with emergencies • perform support duties to others • use effective sales techniques (d) Evaluates own performance

Level 16Level 26Level 3610.2.13 Permanent Waving10.2.13 Permanent Waving

- (a) Sections hair for a permanent wave

- (b) Blocks hair for a permanent wave

- (c) Winds permanent wave rods

10.2.13 Permanent Waving

- (a) Sections, blocks and winds hair for a permanent wave

- (b) Performs sectional permanent waves

- (c) Uses a variety of tools to permanent wave hair

10.2.13 Permanent Waving

- (a) Identifies parts of the permanent wave process:
- chemical
 - physical
- (b) Demonstrates the process of permanent waving:
- sectioning
 - blocking
 - wrapping
 - winding
 - checking the curl
 - neutralizing
- (c) Evaluates own performance

10.3 **Work Standards**10.3 **Work Standards**

- (a) Identifies safety and sanitary regulations applying to grooming/beauty shops
- (b) Identifies common chemical and physical methods of infection control

10.3 **Work Standards**

- (a) Demonstrates appropriate safety practices
- (b) Demonstrates personal and public hygiene practices
- (c) Demonstrates the use of wet and dry sterilizers

10.3 **Work Standards**

- (a) Appreciates the importance of standards in the industry
- (b) Demonstrates employment-level standards in each task area
- (c) Evaluates own performance

10.4 **Supplies Management**10.4 **Supplies Management**

- (a) Identifies appropriate supply management strategies:
- inventory control
 - storage
 - security

10.4 **Supplies Management**

- (a) Identifies local suppliers of professional grooming materials
- (b) Lists major products, equipment, supplies, and tools available from local suppliers

10.4 **Supplies Management**

- (a) Demonstrates supply management skills
- (b) Evaluates own performance

10.5 **Work Area Management**10.5 **Work Area Management**

- (a) Recognizes need for ongoing care and maintenance of equipment, tools and facilities
- (b) Maintains a safe, clean work area

10.5 **Work Area Management**

- (a) Lists and prepares a schedule of care and maintenance duties
- (b) Performs work area maintenance duties

10.5 **Work Area Management**

- (a) Demonstrates leadership and initiative in shop management
- (b) Evaluates own performance

INTEGRATED OCCUPATIONAL PROGRAM

OCCUPATIONAL COMPONENT

SCOPE AND SEQUENCE

Occupational Cluster: Tourism and Hospitality

Occupational Course: **COMMERCIAL FOOD PREPARATION**

Course Sequence: Commercial Food Preparation 16–26–36

- Notes:**
1. Level 16 focuses on identification of the equipment, utensils and basic processes in food preparation. Foods prepared include basic salads, fast foods, soups and baked goods.
 2. Level 26 focuses on continued skill development and preparation of breakfast and lunch cookery in addition to baked goods.
 3. Level 36 focuses on lunch and dinner cookery. All previous skills are practised to entry-level standards.
 4. Students indicating a strong interest in food preparation should be encouraged to take the Food Services sequence as well as the Commercial Food Preparation series.

GENERAL OBJECTIVES

1. To develop students' personal and interpersonal skills.
2. To develop students' awareness of opportunities and working conditions in the commercial food preparation industry.
3. To develop students' knowledge and skills in basic commercial food preparation.
4. To enable students to obtain employment in a related occupation and/or to articulate with another secondary program or post-secondary institution for further education.

		<u>Level 16</u>		<u>Level 26</u>		<u>Level 36</u>	
10. WORK SKILLS							
10.1 Identification							
10.1.1	Job Scope	10.1.1	Job Scope	10.1.1	Job Scope	10.1.1	Job Scope
		(a)	Identifies the scope of careers in the commercial food preparation industry	(a)	Identifies the scope of the local commercial food preparation industry	(a)	Performs job search for an entry-level position in the local commercial food preparation industry
		(b)	Identifies job positions in commercial food preparation	(b)	Defines job duties in the commercial food preparation industry	(b)	Demonstrates correct use of culinary terms
		(c)	Defines related terms	(c)	Uses related terms correctly	(c)	Sketches an outline of a standard kitchen
		(d)	Identifies preparation areas in a kitchen	(d)	Recognizes and describes each preparation area in a kitchen		
10.1.2	Equipment, Tools and Supplies	10.1.2	Equipment, Tools and Supplies	10.1.2	Equipment, Tools and Supplies	10.1.2	Equipment, Tools and Supplies
		(a)	Identifies and uses basic kitchen equipment	(a)	Describes care and maintenance of: • kitchen utensils • cutting tools • spreading tools • serving tools • measuring tools	(a)	Identifies related health and safety regulations

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
	(b) Uses common kitchen tools and utensils (c) Recognizes correct use of cutting tools (d) Recognizes correct use of spreading tools (e) Recognizes correct use of serving tools (f) Recognizes correct use of measuring devices (g) Recognizes and uses correct sanitation practices (h) Recognizes and demonstrates appropriate dishwashing procedures	(b) Describes care and maintenance of common kitchen equipment	(b) Performs basic care and maintenance of: • kitchen utensils • cutting tools • spreading tools • serving tools • measuring tools
10.1.3 <u>Types of Commercial Food Preparation</u>	10.1.3 <u>Types of Commercial Food Preparation</u> (a) Recognizes fast food production processes (b) Identifies fast food products (c) Recognizes differences between: • fast food outlets • institutional cooking • restaurant cooking • fine dining	10.1.3 <u>Types of Commercial Food Preparation</u> (a) Identifies procedures for short-order cookery (b) Identifies procedures for breakfast cookery (c) Identifies procedures for lunch cookery (d) Identifies procedures for dinner cookery	10.1.3 <u>Types of Commercial Food Preparation</u> (a) Lists procedures and products of short-order cookery (b) Lists procedures and products of breakfast cookery (c) Lists procedures and products of luncheon cookery (d) Identifies special features of banquet cookery
10.1.4 <u>Nutrition</u>	10.1.4 <u>Nutrition</u> (a) Defines "nutrition" (b) Identifies the major food groups	10.1.4 <u>Nutrition</u> (a) Lists the major food groups	10.1.4 <u>Nutrition</u> (a) Demonstrates use of basic rules of nutrition

Level 16Level 26Level 36

10.2 Equipment, Tools and Supplies Usage	10.2 Equipment, Tools and Supplies Usage	10.2 Equipment, Tools and Supplies Usage	10.2 Equipment, Tools and Supplies Usage
10.2.1 <u>Equipment</u>	10.2.1 <u>Equipment</u> (a) Describes and uses available kitchen equipment: • range and oven • griddle and broiler • deep fryer • bakers' convection oven • microwave oven • steam kettle • dishwasher • freezer	10.2.1 <u>Equipment</u> (a) Cleans kitchen equipment after use	10.2.1 <u>Equipment</u> (a) Follows sanitation regulations
10.2.2 <u>Tools</u>	10.2.2 <u>Tools</u> (a) Identifies and uses cutting tools: • knives • cleaver • slicer • shredder • chopper (b) Identifies and uses spreading tools: • spatulas • palette knives (c) Identifies and uses mixers: • French whip • wooden spoon • spatula • electric mixer (d) Identifies measuring devices: • ladles • scoops • portion scale (e) Uses measures of: • weight • volume • number	10.2.2 <u>Tools</u> (a) Sharpens knives: • uses steel • uses whetstone (b) Cleans and stores tools in correct location	10.2.2 <u>Tools</u> (a) Demonstrates competency in use of: • knives • spreaders • mixers • measuring devices
10.2.3 <u>Supplies</u>	10.2.3 <u>Supplies</u> (a) Identifies supplies used to clean equipment and tools (b) Identifies major cooking supplies	10.2.3 <u>Supplies</u> (a) Uses appropriate supplies to clean equipment and tools (b) Measures and uses cooking supplies	10.2.3 <u>Supplies</u> (a) Performs cleaning and storage tasks to accepted standards (b) Selects appropriate cooking supplies for each recipe (c) Keeps supply records and initiates re-ordering

<u>Level 16</u>		<u>Level 26</u>		<u>Level 36</u>	
10.3	Work Standards	10.3	Work Standards	10.3	Work Standards
10.3.1	<u>Operating Behaviour</u>	10.3.1	<u>Operating Behaviour</u> (a) Demonstrates safe operating behaviour (b) Maintains standards set by teacher/supervisor	10.3.1	<u>Operating Behaviour</u> (a) Lists safe operating procedures in the kitchen (b) Maintains standards set by teacher/supervisor
10.3.2	<u>Methods of Cooking</u>	10.3.2	<u>Methods of Cooking</u> (a) Recognizes methods of cooking: • boiling • steaming • poaching • stewing • roasting • braising • grilling • baking • frying • deep frying	10.3.2	<u>Methods of Cooking</u> (a) Describes common methods of cooking
10.3.3	<u>Cooking</u>	10.3.3	<u>Cooking</u> (a) Identifies purpose of a recipe (b) Identifies ingredients and prepares fast foods: • hot dogs • hamburgers • French fries • hash browns (c) Identifies ingredients and prepares sandwiches (d) Identifies ingredients and prepares salads: • tossed salads • salad plates • fruit salads • salad sandwich fillings (e) Identifies ingredients and prepares stocks and soups: • basic beef stock • basic chicken stock • basic soups	10.3.3	<u>Cooking</u> (a) Follows recipes (b) Demonstrates breakfast cookery (c) Identifies major food items (d) Prepares eggs: • scrambled • fried • poached • hard boiled • omelette (e) Prepares pancakes: • plain • fruit
				10.3.3	<u>Cooking</u> (a) Demonstrates entry-level operating behaviour (b) Maintains standards set by teacher/supervisor (a) Demonstrates entry-level basic cooking techniques (a) Identifies standards used to judge quality of: • cooked food • uncooked food (b) Identifies use of garnishes (c) Prepares garnishes for: • sandwich plates • salad plates • luncheon plates • dinner plates (d) Demonstrates ability to modify recipes (e) Demonstrates vegetable cookery: • selection • preparation • types of cookery

Level 16Level 26Level 36

- (f) Prepares breads:
 - plain toast
 - French toast
 - cinnamon toast
 - biscuits
 - muffins
- (g) Prepares beverages:
 - tea
 - coffee
 - juices
- (h) Prepares cereals:
 - hot
 - cold
- (i) Prepares fruits
- (j) Demonstrates meal planning and prepares nutritionally balanced:
 - hot lunch plate
 - salad plate
- (k) Identifies ingredients and prepares desserts

- (f) Demonstrates meat cookery:
 - meat selection
 - meat preparation
 - roasting
- (g) Demonstrates use of beverage making machines:
 - coffee
 - hot chocolate
 - juices
 - milk shakes
- (h) Identifies ingredients and prepares desserts:
 - cream pies
 - cream puffs
 - custards
- (i) Evaluates own performance

10.3.4 Baking10.3.4 Baking

- (a) Identifies baking as a career field
- (b) Identifies the ingredients of baked goods
- (c) Prepares simple baked goods

10.3.4 Baking

- (a) Prepares baked goods:
 - breads
 - pies
 - muffins
 - cookies
 - cakes

10.3.4 Baking

- (a) Demonstrates ability to perform basic baking procedures
- (b) Demonstrates ability to adapt recipes
- (c) Evaluates own performance

10.4 **Supplies Management**10.4 **Supplies Management**

- (a) Identifies storage procedures and facilities

10.4 **Supplies Management**

- (a) Demonstrates use of plastic wrap for storage

10.4 **Supplies Management**

- (a) Calculates cost of a meal:
 - identifies ingredients
 - measures ingredients
 - prices ingredients

Level 16

- (b) Identifies storage/handling procedures for fresh foods:
 - meats
 - milk
 - eggs
 - fruits
 - vegetables
- (c) Identifies storage and handling procedures for dry foods:
 - cereal grains
 - cereal flour
- (d) Identifies storage and handling:
 - canned foods
 - frozen foods

Level 26

- (b) Demonstrates correct handling and storage procedures for:
 - fresh foods
 - cooked foods
- (c) Recognizes methods of controlling food wastage

Level 36

- (b) Demonstrates efficient supply management:
 - low wastage
 - correct measuring
 - correct cookery
 - inventory control
- (c) Evaluates own performance

10.5	Work Area Management	10.5	Work Area Management	10.5	Work Area Management	10.5	Work Area Management
		(a)	Recognizes purpose of regular kitchen care and maintenance	(a)	Prepares cleaning and maintenance schedule	(a)	Demonstrates leadership and initiative
		(b)	Sanitizes work areas	(b)	Works with others to ensure a safe, clean, sanitary work area	(b)	Totals cash register receipts
		(c)	Maintains a clean, safe, sanitary work area			(c)	Participates in a maintenance schedule to maintain a safe, clean, sanitary work area

INTEGRATED OCCUPATIONAL PROGRAM

OCCUPATIONAL COMPONENT

SCOPE AND SEQUENCE

Occupational Cluster: Tourism and Hospitality

Occupational Course: **FOOD SERVICES**

Course Sequence: Food Services 16–26–36

- Notes:**
1. Students with a broad interest in the food industry should be encouraged to take Food Services and Commercial Food Preparation courses.
 2. Level 16 focuses on identification of table ware, table settings, food service types and an overview of the tasks in the industry.
 3. Level 26 develops basic food service skills to introductory level.
 4. Level 36 develops skills related to food service to entry-level proficiency.

GENERAL OBJECTIVES

1. To develop students' personal and interpersonal skills.
2. To develop students' awareness of opportunities and working conditions in the food service industry.
3. To develop students' knowledge and skills in food services.
4. To enable students to obtain employment in a related occupation and/or to articulate with another secondary program or post-secondary institution for further education.

Level 16

Level 26

Level 36

10. WORK SKILLS

10.1 Identification

10.1.1 Job Scope	10.1.1 Job Scope	10.1.1 Job Scope	10.1.1 Job Scope
(a) Identifies the scope of the food services industry	(a) Describes the scope of the food service industry	(a) Describes duties of each level of food service worker: • pot washer • bus person • waiter/waitress • headwaiter/maitre d'hôtel • owner/operator	
(b) Identifies duties of food service workers: • bus persons • waiters/waitresses • captains • hosts/hostesses • line servers	(b) Describes career opportunities and career ladders		
(c) Recognizes career ladders in the industry	(c) Lists duties of bus persons		
	(d) Lists duties of food and beverage service workers		
	(e) Identifies duties of a headwaiter/maitre d'hôtel		

<u>Level 16</u>		<u>Level 26</u>		<u>Level 36</u>	
10.1.2	Equipment, Tools and Supplies	10.1.2	Equipment, Tools and Supplies	10.1.2	Equipment, Tools and Supplies
		(a) Identifies tableware: • dishware • flatware • glassware • related tools	(a) Describes the various types of tableware	(a)	Lists and describes items used in place settings
		(b) Identifies storage areas	(b) Identifies related dining room equipment: • bus trays • credenza	(b)	Lists and describes items found in a dining room
10.1.3	<u>Safety and Sanitation</u>	10.1.3	<u>Safety and Sanitation</u>	10.1.3	<u>Safety and Sanitation</u>
		(a) Recognizes and uses accepted safety practices	(a) Demonstrates safe use practices	(a)	Demonstrates knowledge and skill in entry-level: • safety practices • sanitation practices
		(b) Recognizes need for personal and public hygiene	(b) Demonstrates personal and public hygiene practices	(b)	Identifies provincial regulations related to safety and sanitation
10.2	Equipment, Tools and Supplies Usage	10.2	Equipment, Tools and Supplies Usage	10.2	Equipment, Tools and Supplies Usage
10.2.1	<u>Types of Food Service</u>	10.2.1	<u>Types of Food Service</u>	10.2.1	<u>Types of Food Service</u>
		(a) Identifies terms used in the industry	(a) Lists and describes terms used in food service	(a)	Demonstrates use of appropriate food service vocabulary
		(b) Recognizes types of service: • American • English • line • buffet • banquet	(b) Demonstrates American service	(b)	Lists and describes duties required for: • fast food service • American service • English/family style service • French service • buffet service
			(c) Demonstrates English/family style service	(c)	Lists and describes banquet service duties
			(d) Identifies the characteristics of French service		
			(e) Demonstrates fast food and line service		
			(f) Demonstrates buffet service		
10.2.2	<u>Tray Service</u>	10.2.2	<u>Tray Service</u>	10.2.2	<u>Tray Service</u>
		(a) Identifies types of tray service	(a) Serves hot foods	(a)	Performs tray service duties of: • bus person • water/waitress • headwaiter

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
	(b) Loads a serving tray	(b) Serves cold foods	(b) Demonstrates safe and sanitary work habits
	(c) Lifts and carries a serving tray	(c) Carries a loaded service tray	(c) Performs meal services: • American style • English/family style • French style • buffet style
	(d) Carries tableware	(d) Uses American service	
	(e) Handles tableware: • places on table • removes from table	(e) Uses English/family style service	
	(f) Uses a tray stand	(f) Demonstrates fast food service	
10.2.3 <u>Table Settings</u>	10.2.3 <u>Table Settings</u>	10.2.3 <u>Table Settings</u>	10.2.3 <u>Table Settings</u>
	(a) Defines the term "cover"	(a) Lists the parts of a cover	(a) Sets covers appropriate to meal, menu and type of service
	(b) Identifies parts of a cover	(b) Lists basic rules for setting a cover	(b) Demonstrates safe and sanitary work habits
	(c) Identifies types of covers	(c) Describes basic covers: • American • cafeteria • formal • fast food	
	(d) Identifies basic rules for table setting	(d) Demonstrates: • a breakfast cover • a luncheon cover • a formal dinner cover • a dessert cover	
10.2.4 <u>Side Work and Busing</u>	10.2.4 <u>Side Work and Busing</u>	10.2.4 <u>Side Work and Busing</u>	10.2.4 <u>Side Work and Busing</u>
	(a) Defines the terms "side work" and "busing"	(a) Lists side work and busing duties	(a) Performs opening, intermediate and closing side work duties
	(b) Identifies related terms and duties: • folds napkins • refills condiments • sets basic covers • positions a table cloth • handles supplies and equipment • crumbs a table • uses a side stand	(b) Demonstrates opening side work duties	(b) Demonstrates safe and sanitary work habits

Level 16Level 26Level 36

- (c) Demonstrates crumbing and clearing a table
- (d) Demonstrates changing a tablecloth
- (e) Folds a napkin
- (f) Sets up and maintains a side stand

- (c) Demonstrates entry-level busing abilities

10.2.5 Guest Relationships10.2.5 Guest Relationships

- (a) Identifies the meaning of "service"
- (b) Identifies guest handling practices:
 - greets
 - seats
 - attends
- (c) Recognizes importance of verbal and non-verbal behaviour

10.2.5 Guest Relationships

- (a) Demonstrates correct guest/staff relationships
- (b) Handles guests' complaints
- (c) Handles guests' children
- (d) Handles handicapped guests
- (e) Handles elderly guests

10.2.5 Guest Relationships

- (a) Performs headwaiter/maître d'hôtel hosting duties
- (b) Handles special situations
- (c) Demonstrates effective and efficient guest relations

10.2.6 Taking Menu Orders10.2.6 Taking Menu Orders

- (a) Identifies procedure of menu presentations
- (b) Uses an order pad/bill
- (c) Calculates bill totals

10.2.6 Taking Menu Orders

- (a) Presents and interprets menus
- (b) Identifies types of menus
- (c) Takes orders
- (d) Places orders
- (e) Receives and checks orders
- (f) Serves orders
- (g) Records prices
- (h) Calculates total cost of meal for a party of four persons

10.2.6 Taking Menu Orders

- (a) Performs order taking, placing, receiving operations
- (b) Records and calculates meal costs for four guests
- (c) Presents check to guests

★10.2.7 Beverage Service10.2.7 Beverage Service

- (a) Identifies types of beverages
- (b) Identifies common non-alcoholic beverages
- (c) Recognizes importance of provincial regulations governing the sale of alcoholic beverages

10.2.7 Beverage Service

- (a) Serves non-alcoholic beverages
- (b) Identifies provincial liquor regulations and their applications

10.2.7 Beverage Service

- (a) Complies with house standards
- (b) Prepares hot beverages table side
- (c) Complies with provincial liquor regulations

E = Elective

★ Teachers should ensure that they are familiar with *Alberta Liquor Control Board General Guidelines and Regulations* and their school board's policy regarding instruction in the elective components of this instructional unit.

<u>Level 16</u>		<u>Level 26</u>		<u>Level 36</u>
10.2.8	<u>Salesmanship</u>	10.2.8	<u>Salesmanship</u>	10.2.8 <u>Salesmanship</u>
	(a) Identifies the purpose of salesmanship	(a) Lists and describes the skills of salesmanship		(a) Uses suggestive selling techniques
	(b) Recognizes importance of: • personality • first impression • grooming	(b) Recognizes the components of salesmanship (P.P.P.S.): • person • place • product • service		(b) Uses display selling techniques
		(c) Recognizes guests' needs		(c) Demonstrates P.P.P.S. components of salesmanship
10.2.9	<u>Cashier Duties</u>	10.2.9 <u>Cashier Duties</u>	10.2.9 <u>Cashier Duties</u>	10.2.9 <u>Cashier Duties</u>
	(a) Identifies duties of a cashier	(a) Recognizes responsibilities of a cashier		(a) Handles cash and credit transactions
	(b) Makes change	(b) Processes credit cards		(b) Uses customer relations techniques
	(c) Identifies basic procedures for handling credit sales	(c) Handles cheques		(c) Deals with problems
10.3	Work Standards	10.3 Work Standards	10.3 Work Standards	10.3 Work Standards
	(a) Identifies related standards: • sanitation • safety • security • personal	(a) Demonstrates ability to work to standards set by teacher/supervisor		(a) Demonstrates employment-level standards
	(b) Maintains standards set by teacher/supervisor			(b) Evaluates own performance
10.4	Supplies Management	10.4 Supplies Management	10.4 Supplies Management	10.4 Supplies Management
	(a) Identifies basic supply management practices	(a) Records items when supply is low		(a) Maintains supply inventory
	(b) Identifies correct storage procedures	(b) Uses correct storage practices		(b) Recommends purchases
		(c) Recognizes condiments and describes their uses		(c) Maintains equipment inventory
		(d) Identifies linen storage and cleaning/replacement procedures		(d) Evaluates own performance

Level 16Level 26Level 36

10.5	Work Area Management	10.5	Work Area Management	10.5	Work Area Management	10.5	Work Area Management
		(a)	Recognizes the need for regular care and maintenance	(a)	Cares for personal work area	(a)	Works with others to maintain the total work area
		(b)	Demonstrates safe and sanitary practices	(b)	Recognizes the need for teamwork	(b)	Demonstrates leadership and initiative
		(c)	Maintains a safe, clean work area			(c)	Evaluates own performance

INTEGRATED OCCUPATIONAL PROGRAM

OCCUPATIONAL COMPONENT

SCOPE AND SEQUENCE

Occupational Cluster: Tourism and Hospitality

Occupational Course: **MAINTENANCE AND HOSPITALITY SERVICES**

Course Sequence: Maintenance and Hospitality Services 16–26–36

- Notes:**
1. Level 16 focuses on equipment and tool identification, building systems identification and basic floor care techniques.
 2. Level 26 focuses on building systems maintenance, flooring care, cleaning duties and special area care.
 3. Level 36 focuses on practising previous skills to entry-level standards and introduction to hotel duties.
 4. Students with interest in this area of the tourism and hospitality industry should be encouraged to consider enrolling in Construction or Building Services to increase their ability to perform maintenance tasks.

GENERAL OBJECTIVES

1. To develop students' personal and interpersonal skills.
2. To develop students' awareness of opportunities and working conditions in the maintenance and hospitality industry.
3. To develop students' knowledge and skills in maintenance and hospitality services.
4. To enable students to obtain employment in a related occupation and/or to articulate with another secondary program or post-secondary institution for further education.

Level 16

Level 26

Level 36

10. WORK SKILLS

10.1 Identification

10.1.1 Job Scope

10.1.1 Job Scope

- (a) Identifies careers in the maintenance and hospitality services industry
- (b) Identifies scope of related jobs:
 - custodian
 - janitor
 - security guard
 - general maintenance
 - bellhop
 - housekeeper
 - chambermaid
 - houseman
- (c) Defines industry-related terms

10.1.1 Job Scope

- (a) Describes and lists the knowledge and skills required for each related job
Level 16, 10.1.1 (b)

10.1.1 Job Scope

- (a) Identifies jobs of major interest
- (b) Identifies local job opportunities in areas of major interest

10.1.2 Equipment, Tools and Supplies

10.1.2 Equipment, Tools and Supplies

- (a) Identifies major equipment, tools and supplies used in job areas

10.1.2 Equipment, Tools and Supplies

- (a) Takes inventory of equipment, tools and supplies by category

10.1.2 Equipment, Tools and Supplies

- (a) Labels and properly identifies location of equipment, tools and supplies

Level 16Level 26Level 36

- (b) Classifies equipment and tools according to function:
- protective
 - cleaning
 - repair
 - garden work
 - woodwork
 - plumbing
 - electrical work

10.2 **Equipment, Tools and Supplies Usage**

10.2 **Equipment, Tools and Supplies Usage**

10.2 **Equipment, Tools and Supplies Usage**

10.2 **Equipment, Tools and Supplies Usage**

10.2.1 Tools and Measuring Devices

10.2.1 Tools and Measuring Devices

10.2.1 Tools and Measuring Devices

10.2.1 Tools and Measuring Devices

- (a) Demonstrates safe use of basic equipment and hand tools
- (b) Demonstrates basic tool maintenance procedures
- (c) Identifies measuring devices:
- linear
 - temperature
 - pressure
 - volume
 - consumption

- (a) Uses the correct tool for the job

- (b) Uses measuring devices

- (a) Demonstrates entry-level ability to use:
- measuring devices
 - hand tools
 - maintenance procedures
- (b) Demonstrates appropriate safe use practices

10.2.2 Basic Plumbing

10.2.2 Basic Plumbing

10.2.2 Basic Plumbing

10.2.2 Basic Plumbing

- (a) Identifies basic equipment, tools and supplies used for plumbing
- (b) Identifies and describes basic terms related to plumbing:
- supply lines
 - drainage lines
 - vents
 - traps
 - fixtures
- (c) Identifies safety and sanitation rules

- (a) Performs basic plumbing tasks

- (b) Demonstrates safe use practices

- (a) Demonstrates entry-level ability to perform basic plumbing tasks
- (b) Demonstrates safe use practices

- (c) Evaluates own performance

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
10.2.3 <u>Basic Electrical Work</u>	10.2.3 <u>Basic Electrical Work</u> (a) Identifies basic equipment, tools and supplies used in electrical maintenance (b) Identifies and defines basic electrical terms and features (c) Demonstrates safety procedures (d) Reads a power meter (e) Resets timers and clocks	10.2.3 <u>Basic Electrical Work</u> (a) Reviews Level 16 unit (b) Demonstrates safe use electrical practices (c) Installs electrical cord ends (d) Replaces simple light fixtures (e) Replaces bulbs and fuses (f) Resets breakers	10.2.3 <u>Basic Electrical Work</u> (a) Demonstrates entry-level ability to carry out basic electrical maintenance tasks (b) Demonstrates safe use practices (c) Evaluates own performance
10.2.4 <u>Basic Heating Systems Work</u>	10.2.4 <u>Basic Heating Systems Work</u> (a) Identifies and describes common heating systems and components: • residential • industrial (b) Defines related terms; e.g., • boiler • valves • burners • fans • ducts • gauges • dampers (c) Describes seasonal use and maintenance of heating systems: • residential • industrial (d) Identifies safety procedures	10.2.4 <u>Basic Heating Systems Work</u> (a) Reviews Level 16 unit (b) Identifies tasks involved in basic care of heating systems (c) Resets controls (d) Identifies basic procedures to conserve energy	10.2.4 <u>Basic Heating Systems Work</u> (a) Demonstrates entry-level ability to carry out basic care of heating systems (b) Demonstrates safe use practices (c) Evaluates own performance
10.2.5 <u>Ceramic Tile and Glass Care</u>	10.2.5 <u>Ceramic Tile and Glass Care</u> (a) Identifies types of ceramic tile and their basic care	10.2.5 <u>Ceramic Tile and Glass Care</u> (a) Recognizes ceramic tile types and care methods (b) Identifies characteristics of glass: • transparency • security • thickness (c) Identifies and describes function of a sealed window unit	10.2.5 <u>Ceramic Tile and Glass Care</u> (a) Demonstrates entry-level ability to care for tile and glass (b) Demonstrates safe use practices (c) Evaluates own performance

Level 16Level 26Level 36

- (d) Identifies safety procedures
- (e) Demonstrates safe use practices in care of tile and glass

10.2.6 Carpet and Upholstery Cleaning

10.2.6 Carpet and Upholstery Cleaning

10.2.6 Carpet and Upholstery Cleaning

10.2.6 Carpet and Upholstery Cleaning

Carpets

- (a) Identifies the history and construction of carpets
- (b) Identifies carpet fibres and materials
- (c) Identifies general cleaning methods
- (d) Demonstrates minor carpet repairs
- (e) Demonstrates soil and stain removal
- (f) Demonstrates general carpet maintenance
- (g) Demonstrates cleaning techniques:
 - shampooing
 - steam cleaning
 - extraction cleaning
 - dry chemical cleaning
- (h) Demonstrates safety procedures

Carpets

- (a) Demonstrates entry-level ability to clean carpets
- (b) Demonstrates safe use practices
- (c) Evaluates own performance

Upholstery

- (a) Identifies upholstery materials
- (b) Identifies soils and stains
- (c) Recognizes problems of mildew and odour
- (d) Demonstrates upholstery protection methods
- (e) Demonstrates use of static electricity protectors
- (f) Demonstrates safety procedures

Upholstery

- (a) Demonstrates entry-level ability to clean upholstery
- (b) Demonstrates safe use practices
- (c) Evaluates own performance

10.2.7 Security Duties

10.2.7 Security Duties

10.2.7 Security Duties

10.2.7 Security Duties

- (a) Identifies the duties of security and protection for:
 - residential homes
 - institutions
 - private businesses

- (a) Identifies local security guard companies

Level 16Level 26Level 36

- (b) Identifies and demonstrates procedures related to building and property security:
- access security
 - window security
 - property protection
 - handling lost and found items
 - equipment security
 - fire prevention
- (c) Describes the relationship between security duties and other jobs in the maintenance and hospitality industry

- (b) Identifies and describes duties of security guard
- (c) Maintains fire protection equipment
- (d) Demonstrates procedures for handling:
- information requests
 - unauthorized entry
 - unauthorized presence
 - vandalism
 - belligerent and noisy people

10.2.8 General Custodial Duties

10.2.8 General Custodial Duties

10.2.8 General Custodial Duties

- (a) Identifies tasks performed by custodians in:
- schools
 - apartments
 - hotels
 - office buildings
- (b) Demonstrates basic job skills:
- removing and disposing of wastes
 - dusting
 - using cleaning chemicals
 - using floor cleaning machines
- (c) Identifies procedures for safe disposal of:
- glass
 - chemicals
 - liquids

10.2.8 General Custodial Duties

- (a) Demonstrates entry-level competencies of a custodian
- (b) Demonstrates safe use practices
- (c) Evaluates own performance

10.2.9 Basic Floor Care

10.2.9 Basic Floor Care

10.2.9 Basic Floor Care

- (a) Identifies types of floor surfaces
- (b) Demonstrates wet scrubbing

10.2.9 Basic Floor Care

- (a) Demonstrates entry-level procedures of floor care
- (b) Demonstrates safe use practices

Level 16Level 26Level 36

- (c) Demonstrates dry scrubbing
- (d) Demonstrates stripping
- (e) Demonstrates sealing and finishing
- (f) Demonstrates buffing
- (g) Demonstrates safe use practices

- (c) Evaluates own performance

10.2.10 Special Area Maintenance10.2.10 Special Area Maintenance10.2.10 Special Area Maintenance10.2.10 Special Area MaintenanceGeneral Duties

- (a) Identifies special areas:
 - washrooms
 - locker rooms/showers
 - drinking fountains
 - medical rooms
- (b) Identifies the maintenance duties related to each special area
- (c) Demonstrates cleaning a ceiling
- (d) Demonstrates washing a wall
- (e) Demonstrates cleaning chalkboards
- (f) Demonstrates cleaning light fixtures
- (g) Demonstrates cleaning furniture, glass, metals

General Duties

- (a) Demonstrates entry-level competencies to perform general duties
- (b) Demonstrates safe use practices
- (c) Evaluates own performance

Infection Control

- (a) Identifies harmful bacteria
- (b) Identifies safe use of disinfectants
- (c) Demonstrates setting up and stocking a utility cart

Infection Control

- (a) Demonstrates entry-level infection control procedures
- (b) Demonstrates safe use practices
- (c) Evaluates own performance

Washroom Cleaning and Maintenance

- (a) Demonstrates cleaning of all washroom fixtures
- (b) Demonstrates supply replacement
- (c) Demonstrates infection control

Washroom Cleaning and Maintenance

- (a) Demonstrates entry-level procedures for washroom cleaning and maintenance
- (b) Demonstrates safe use practices
- (c) Evaluates own performance

Level 16Level 26Level 36Locker Room/Shower
Maintenance

- (a) Demonstrates cleaning of all related fixtures and equipment
- (b) Demonstrates supply replacement
- (c) Demonstrates infection control

Drinking Fountain
Maintenance

- (a) Demonstrates sanitation procedures
- (b) Demonstrates basic maintenance, repair procedures

Locker Room/Shower
Maintenance

- (a) Demonstrates entry-level procedures for locker room/shower maintenance
- (b) Demonstrates safe use practices
- (c) Evaluates own performance

Drinking Fountain
Maintenance

- (a) Demonstrates entry-level skills for basic drinking fountain maintenance
- (b) Demonstrates sanitary practices
- (c) Evaluates own performance

10.2.11 Houseperson,
Chamber-
person

10.2.11 Houseperson,
Chamberperson

10.2.11 Houseperson,
Chamberperson

10.2.11 Houseperson,
Chamberperson

At the teacher's discretion, Units 10.2.11–10.2.13 may be introduced at the 16- and 26-level and developed further at the 36-level.

- (a) Identifies knowledge and skills required for job
- (b) Identifies local job opportunities
- (c) Demonstrates ability to:
 - clean and sanitize rooms, bathrooms and hallways
 - sweep and mop floors
 - vacuum carpets
 - dust
 - empty wastes
 - replace soiled towels
 - provide toiletries
 - fill dispensing machines
 - clean rugs
 - change bedding
 - move furniture
 - make minor repairs
- (d) Demonstrates inventory control:
 - stores linen
 - stores supplies
 - requisitions new items
 - conserves equipment, tools, supplies and energy
 - maintains utility cart

Level 16

Level 26

Level 36

- (e) Demonstrates appropriate safety and sanitation practices
- (f) Evaluates own performance

10.2.12 Bellhop

10.2.12 Bellhop

10.2.12 Bellhop

10.2.12 Bellhop

- (a) Identifies knowledge and skills required for job
- (b) Identifies local job opportunities
- (c) Demonstrates ability to:
 - relate well to others
 - project a positive image
 - provide service to others
 - lift and carry luggage
 - use tact and consideration
- (d) Evaluates own performance

10.2.13 Desk Clerk

10.2.13 Desk Clerk

10.2.13 Desk Clerk

10.2.13 Desk Clerk

- (a) Identifies knowledge and skills required for job
- (b) Identifies local job opportunities
- (c) Demonstrates ability to:
 - relate well to others
 - project a positive image
 - deal with requests for information
 - check in guests
 - check out guests
 - handle complaints
 - receive and distribute communications and parcels
 - respond to emergencies
 - keep records
 - use correct credit procedures
 - work as a member of a team
 - follow instructions
- (d) Evaluates own performance

		<u>Level 16</u>		<u>Level 26</u>		<u>Level 36</u>	
10.3	Work Standards	10.3	Work Standards	10.3	Work Standards	10.3	Work Standards
		(a)	Identifies related standards: • sanitation • safety • security • personal	(a)	Demonstrates ability to work to standards set by teacher/supervisor	(a)	Demonstrates employment-level standards in each job-related area
		(b)	Maintains standards set by teacher/supervisor			(b)	Evaluates own performance
10.4	Supplies Management	10.4	Supplies Management	10.4	Supplies Management	10.4	Supplies Management
		(a)	Identifies good supply management strategies: • inventory control • storage • security	(a)	Describes job-specific supply management strategies: • carpet/upholstery cleaning • basic floor care • special area maintenance • infection control • washroom maintenance • locker room/shower maintenance • drinking fountain maintenance	(a)	Demonstrates supply management skills appropriate to each job area
						(b)	Evaluates own performance
10.5	Work Area Management	10.5	Work Area Management	10.5	Work Area Management	10.5	Work Area Management
		(a)	Recognizes need for regular care and maintenance in each work area	(a)	Lists the care and maintenance duties according to accepted schedules	(a)	Demonstrates leadership and initiative
		(b)	Maintains a safe, clean work area	(b)	Maintains a safe, clean work area	(b)	Maintains a safe, clean work area
						(c)	Evaluates own performance

INTEGRATED OCCUPATIONAL PROGRAM

OCCUPATIONAL COMPONENT

SCOPE AND SEQUENCE

Occupational Cluster: Transportation

Occupational Course: **AUTOMOTIVE SERVICES**

Course Sequence: Automotive Services 16–26–36

- Notes:**
1. Automotive Services 16 emphasizes skill development in the area of fluid and component replacement.
 2. Automotive Services 26 and 36 emphasize skill development in the area of repairs and the application of knowledge and skills learned in Automotive Services 16.
 3. Students indicating an interest in automobiles should be encouraged to consider taking the Service Station Services sequence.

GENERAL OBJECTIVES

1. To develop students' personal and interpersonal skills.
2. To develop students' awareness of opportunities and working conditions in the automotive services industry.
3. To develop students' knowledge and skills in basic vehicle servicing.
4. To enable students to obtain employment in a related occupation and/or to articulate with another secondary program or post-secondary institution for further education.

Level 16

Level 26

Level 36

10. WORK SKILLS

10.1 Identification

10.1.1 Job Scope

10.1.1 Job Scope

- (a) Identifies jobs in the automotive services industry
- (b) Identifies related jobs
- (c) Identifies job duties for positions in the automotive services industry
- (d) Identifies tasks done by entry-level employees
- (e) Identifies automotive trade terms

10.1.1 Job Scope

- (a) Defines automotive trade terms
- (b) Identifies local job opportunities

10.1.1 Job Scope

- (a) Identifies future career opportunities
- (b) Conducts a job search

10.1.2 Equipment, Tools and Supplies

10.1.2 Equipment, Tools and Supplies

- (a) Identifies major equipment and tools used in servicing vehicles

10.1.2 Equipment, Tools and Supplies

- (a) Takes inventory of major items:
 - equipment
 - tools
 - supplies

10.1.2 Equipment, Tools and Supplies

- (a) Identifies and records condition of equipment and tools

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
	(b) Identifies major automotive supply items (fluids): • fuels • oils • greases • coolants • additives	(b) Lists and describes major shop supplies: • fluids	(b) Maintains inventory of supply items
	(c) Identifies common automotive hardware: • cotter pins • nuts • bolts • washers • screws • snap rings	(c) Lists and describes major groups of hardware	(c) Maintains inventory of major groups of hardware
	(d) Identifies automotive sealing practices and supplies		
	(e) Demonstrates use of hardware and sealants		
	(f) Identifies and records storage areas for equipment, tools and supplies		
10.1.3 <u>Parts of a Vehicle</u>	10.1.3 <u>Parts of a Vehicle</u> (a) Identifies the major parts of a vehicle: • body • frame • power train • suspension • steering	10.1.3 <u>Parts of a Vehicle</u> (a) Identifies and records types of vehicle parts	10.1.3 <u>Parts of a Vehicle</u> (a) Records details of condition of major parts of vehicle on customer record sheets
10.1.4 <u>Engines and Engine Systems</u>	10.1.4 <u>Engines and Engine Systems</u> (a) Identifies the basic components of an internal combustion engine (b) Identifies the operating principles of a four-stroke cycle (c) Identifies engine support systems: • fuel • lubrication • cooling • ignition • air induction • exhaust	10.1.4 <u>Engines and Engine Systems</u> (a) Describes the basic principles of vehicle combustion system (b) Identifies engine systems on different makes and models of vehicles (c) Lists and describes the major engine systems	10.1.4 <u>Engines and Engine Systems</u> (a) Demonstrates entry-level skills in engine and engine system identification (b) Demonstrates entry-level skills in the use of vehicle hardware, sealants and related tools (c) Demonstrates awareness of interrelationship between all systems

Level 16Level 26Level 36

- (d) Performs a basic vehicle inspection
- (e) Demonstrates the ability to identify basic condition of:
 - steering and suspension
 - brakes
 - drive line
 - exhaust
 - tires
 - electrical
 - engine

10.2 **Equipment, Tools and Supplies Usage**

10.2 **Equipment, Tools and Supplies Usage**

- (a) Demonstrates ability to use basic automotive equipment and tools:
 - wrenches
 - pliers
 - hammers
 - screwdrivers
 - punches and chisels
 - measuring tools
 - hoists
 - floor jacks and jackstands
- (b) Identifies safe handling practices

10.2 **Equipment, Tools and Supplies Usage**

- (a) Demonstrates ability to use basic equipment and tools in combination, to perform specific tasks
- (b) Demonstrates safe handling practices
- (c) Demonstrates the use of testers:
 - compression
 - oil pressure
 - vacuum
 - coolant
 - other
- (d) Demonstrates the use of measuring equipment:
 - micrometers
 - calipers

10.2 **Equipment, Tools and Supplies Usage**

- (a) Demonstrates entry-level skills in using basic equipment, tools, testers and measuring devices
- (b) Demonstrates the use of electrical testing equipment:
 - voltage
 - current
 - resistance
- (c) Demonstrates safe use practices

10.2.1 Vehicle Cleaning

10.2.1 Vehicle Cleaning

- (a) Identifies the importance of maintaining a clean vehicle

10.2.1 Vehicle Cleaning

- (a) Demonstrates pride and care in vehicle cleaning practices

10.2.1 Vehicle Cleaning

- (a) Demonstrates entry-level skills in vehicle cleaning (detailing)

Level 16Level 26Level 36

- (b) Demonstrates ability to clean a vehicle inside and out:
- hand wash
 - pressure wash
 - vacuum
 - polish

- (b) Evaluates own performance

10.2.2 Basic Automotive Maintenance

10.2.2 Basic Automotive Maintenance

- (a) Identifies basic replacement services (under hood changes):
- oil and oil filter
 - coolant
 - belts
 - hoses
 - bulbs
 - tire pressure
- (b) Demonstrates basic maintenance services
- (c) Checks and adjusts vehicle fluid levels
- (d) Identifies tasks involved in basic tire servicing:
- tire changing
 - tire repair
 - tire balancing

10.2.2 Basic Automotive Maintenance

- (a) Demonstrates ability to perform basic maintenance services:
- fuel filters
 - windshield wiper blades
- (b) Recognizes and compares products used for basic maintenance services:
- manufacturer
 - cost
 - quality
 - warranty
- (c) Demonstrates ability to perform tire work:
- identifies tire types
 - explains tire codes
 - diagnoses tire wear
 - rotates
 - mounts and dismounts
 - repairs
 - balances

10.2.2 Basic Automotive Maintenance

- (a) Demonstrates ability to perform basic maintenance services
- (b) Writes sales or work orders
- (c) Calculates work order costs

10.2.3 Mechanical Services

10.2.3 Mechanical Services

- (a) Diagnosis common vehicle problems by:
- sight
 - sound
 - smell
 - customer information
 - instruments

10.2.3 Mechanical Services

- (a) Identifies the meanings of "troubleshooting" and "tune-up"

10.2.3 Mechanical Services

- (a) Identifies the components of a charging system

Level 16

- (b) Demonstrates the ability to replace exhaust system parts
- (c) Demonstrates ability to repair minor leaks
- (d) Demonstrates safe practices used in automotive servicing

Level 26

- (b) Identifies the function and parts of fuel system components
- (c) Demonstrates ability to perform basic services on carburetors:
 - disassembles and reassembles carburetors
 - simple adjustments
- (d) Identifies symptoms, causes of:
 - starting problems
 - lack of power
 - knocks and noises
 - surging
 - overheating
 - excessive vibration
- (e) Demonstrates ability to replace major components:
 - engine
 - transmission
 - clutch
 - rear axle assembly
- (f) Demonstrates ability to replace shock absorbers
- (g) Demonstrates ability to replace brake shoes and pads
- (h) Demonstrates basic brake maintenance procedures
- (i) Maintains safe practices

Level 36

- (b) Identifies problems related to a charging system:
 - battery
 - alternator
 - voltage regulator
 - wiring
- (c) Identifies the components of a starting system
- (d) Recognizes problems related to a starting system:
 - starter
 - solenoid
 - wiring
 - battery
- (e) Demonstrates entry-level ability to identify basic problems and possible causes of vehicle problems and to assist mechanic in performing services
- (f) Demonstrates entry-level safe practices
- (g) Demonstrates entry-level ability to adjust carburetors:
 - fuel air mixtures
 - idle speeds
 - choke setting
- (h) Demonstrates ability to adjust ignitions:
 - plugs
 - ignition timing
- (i) Evaluates own performance

Level 16			Level 26			Level 36		
10.3	Work Standards	10.3	Work Standards	10.3	Work Standards	10.3	Work Standards	
		(a)	Identifies the use of standards in the industry	(a)	Demonstrates ability to follow instructions	(a)	Demonstrates pride in work	
		(b)	Identifies industry safety standards	(b)	Demonstrates ability to record information related to job	(b)	Demonstrates employment-level standards of performance	
		(c)	Maintains standards set by teacher/supervisor	(c)	Maintains standards set by teacher/supervisor	(c)	Maintains standards set by teacher/supervisor	
						(d)	Evaluates own performance	
10.4	Supplies Management	10.4	Supplies Management	10.4	Supplies Management	10.4	Supplies Management	
		(a)	Identifies appropriate supply management strategies: • inventory control • storage • security	(a)	Identifies and lists local suppliers of wholesale automotive supplies	(a)	Demonstrates entry-level supply management skills	
						(b)	Evaluates own performance	
10.5	Work Area Management	10.5	Work Area Management	10.5	Work Area Management	10.5	Work Area Management	
		(a)	Identifies the procedures commonly used in care and maintenance of an automotive shop	(a)	Lists and prepares a schedule of care and maintenance duties	(a)	Demonstrates leadership and initiative	
		(b)	Identifies technical references	(b)	Uses technical references	(b)	Locates specific technical references	
		(c)	Maintains clean, safe work area	(c)	Maintains clean, safe work area	(c)	Maintains clean, safe work area	
						(d)	Evaluates own performance	

INTEGRATED OCCUPATIONAL PROGRAM

OCCUPATIONAL COMPONENT

SCOPE AND SEQUENCE

Occupational Cluster: Transportation

Occupational Course: **SERVICE STATION SERVICES**

Course Sequence: Service Station Services 16–26–36

- Notes:**
1. Service Station Services 16 focuses on front end operations and minor repairs.
 2. Service Station Service 26–36 focuses on sales skills, general vehicle servicing and business practices.
 3. Students indicating an interest in automotives should be encouraged to consider taking the Automotives Services sequence.

GENERAL OBJECTIVES

1. To develop students' personal and interpersonal skills.
2. To develop students' awareness of opportunities and employment conditions in the operation of a service station.
3. To develop students' knowledge and skills in service station services.
4. To enable students to obtain employment in a related occupation and/or to articulate with another secondary program or post-secondary institution for further education.

Level 16

Level 26

Level 36

10. WORK SKILLS

10.1 Identification

10.1.1 Job Scope

10.1.1 Job Scope

- (a) Identifies the extent of the service station industry
- (b) Identifies careers related to service station services
- (c) Identifies scope of related jobs
- (d) Identifies job requirements
- (e) Recognizes procedures for finding a job

10.1.1 Job Scope

- (a) Lists scope of related jobs
- (b) Demonstrates correct job search procedures
- (c) Describes the origins of the oil and gas industry
- (d) Identifies the origins of the service station business
- (e) Identifies present and possible future types of service stations

10.1.1 Job Scope

- (a) Identifies job opportunities in the community
- (b) Demonstrates a job search
- (c) Identifies future career opportunities in the service station industry

10.1.2 Equipment, Tools and Supplies

10.1.2 Equipment, Tools and Supplies

- (a) Identifies equipment and tools related to service station services

10.1.2 Equipment, Tools and Supplies

- (a) Inventories equipment, tools and supplies of a service station

10.1.2 Equipment, Tools and Supplies

- (a) Identifies and records condition of equipment, tools and major supply items

Level 16

- (b) Describes the use of major equipment
- (c) Identifies products commonly sold at service stations
- (d) Identifies supplies used in operating a service station
- (e) Identifies measuring tools:
 - meters
 - rulers

Level 26Level 36

- (b) Identifies measuring tools:
 - micrometers
 - calipers

10.2	Equipment, Tools and Supplies Usage	10.2	Equipment, Tools and Supplies Usage	10.2	Equipment, Tools and Supplies Usage	10.2	Equipment, Tools and Supplies Usage
		(a)	Demonstrates the ability to use basic equipment and tools: • fuel pumps • shop equipment • sales equipment • hand tools	(a)	Demonstrates the use of basic equipment and tools: • hoists • floor jacks • impact wrench • time machine	(a)	Demonstrates entry-level competencies with tools, equipment and supplies: • air hammer • oxyacetylene torch
		(b)	Reads meters—linear, log	(b)	Uses shop reference material with direction	(b)	Uses shop reference material
		(c)	Identifies vehicle repair reference material	(c)	Records meter readings	(c)	Uses industry-related hand tools and equipment
		(d)	Identifies common types of fuel	(d)	Uses basic hand tools	(d)	Demonstrates safe use practices
		(e)	Identifies standard safety practices	(e)	Demonstrates standard safety practices	(e)	Evaluates own performance
10.2.1	<u>Sales Office Operation</u>	10.2.1	<u>Sales Office Operation</u>	10.2.1	<u>Sales Office Operation</u>	10.2.1	<u>Sales Office Operation</u>
		(a)	Identifies the functions of a sales office	(a)	Identifies and records transactions using: • manual methods • electronic methods	(a)	Demonstrates the operation of a sales office
		(b)	Identifies the range of stock in a sales office	(b)	Recognizes security procedures for handling cash, cheques and supplies	(b)	Demonstrates good customer relations
		(c)	Identifies the cash control system			(c)	Demonstrates effective sales techniques
		(d)	Identifies the credit control system			(d)	Demonstrates appropriate record keeping practices: • gas sales • other sales

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
	(e) Identifies the operating procedures for recording: • gas sales • product sales • service sales (f) Demonstrates ability to serve gas (g) Demonstrates ability to provide customer services: • pumping gas • fluid checks • washing windows • cleaning mirrors • providing information		(e) Prices stock and follows stock control practices (f) Calculates costs, sales, profit and loss (g) Evaluates own performance
10.2.2 <u>Hoisting and Lifting</u>	10.2.2 <u>Hoisting and Lifting</u> (a) Identifies lifting procedures (b) Demonstrates lifting procedures: • hoists • floor jacks	10.2.2 <u>Hoisting and Lifting</u> (a) Demonstrates use of hoist and lift on different sizes, types of vehicles (b) Demonstrates standard safety practices	10.2.2 <u>Hoisting and Lifting</u> (a) Demonstrates entry-level skills in using hoists, lifts (b) Demonstrates safe use practices (c) Evaluates own performance
10.2.3 <u>Inspections</u>	10.2.3 <u>Inspections</u> (a) Identifies the items checked in a basic vehicle inspection	10.2.3 <u>Inspections</u> (a) Demonstrates techniques of performing a basic vehicle check: • under hood check • under vehicle check • safety inspection	10.2.3 <u>Inspections</u> (a) Demonstrates entry-level vehicle inspection skills (b) Follows accepted safety practices (c) Evaluates own performance
10.2.4 <u>Tire Service</u>	10.2.4 <u>Tire Service</u> (a) Identifies the sequence of tasks to: • change a tire • rotate wheels • balance wheels • adjust tire inflation (b) Demonstrates standard safety practices	10.2.4 <u>Tire Service</u> (a) Demonstrates ability to repair tires: • plug method • patch method (b) Demonstrates ability to: • change a tire • rotate wheels • balance wheel • repair tires • inflate tires to specification	10.2.4 <u>Tire Service</u> (a) Demonstrates entry-level skill in wheel and tire handling and maintenance (b) Follows accepted safety practices

	<u>Level 16</u>	<u>Level 26</u>	<u>Level 36</u>
		(c) Demonstrates standard safety practices	(c) Evaluates own performance
10.2.5 <u>Lubrication Service</u>	10.2.5 <u>Lubrication Service</u> (a) Identifies basic lubrication services (b) Performs basic lubrication checks	10.2.5 <u>Lubrication Service</u> (a) Demonstrates a complete oil, filter change service (b) Demonstrates the ability to perform chassis lubrication (c) Demonstrates the ability to check lubrication levels (d) Demonstrates standard safety practices	10.2.5 <u>Lubrication Service</u> (a) Demonstrates entry-level lubrication skills (b) Demonstrates entry-level safety practices (c) Evaluates own performance
10.2.6 <u>Electrical Systems</u>	10.2.6 <u>Electrical Systems</u> (a) Identifies basic point-of-sale electrical repairs/replacements (b) Demonstrates standard safety practices (c) Demonstrates battery boosting	10.2.6 <u>Electrical Systems</u> (a) Demonstrates basic point-of-sale electrical repairs/replacement: • battery replacement • battery cable clamp • fuse replacement • bulb replacement (b) Services a battery	10.2.6 <u>Electrical Systems</u> (a) Demonstrates entry-level point-of-sale basic electrical repair/replacement techniques (b) Demonstrates entry-level safety practices (c) Evaluates own performance
10.2.7 <u>Cooling Systems</u>	10.2.7 <u>Cooling Systems</u> (a) Identifies the basic principles of a cooling system (b) Identifies the basic parts of a vehicle's cooling system (c) Demonstrates standard safety practices	10.2.7 <u>Cooling Systems</u> (a) Pressure tests a cooling system (b) Flushes cooling system (c) Tests coolant strength (d) Replaces hoses (e) Demonstrates standard safety practices	10.2.7 <u>Cooling Systems</u> (a) Demonstrates entry-level ability to provide basic maintenance to a cooling system (b) Demonstrates entry-level standard safety practices (c) Evaluates own performance
10.2.8 <u>Fuel Systems</u>	10.2.8 <u>Fuel Systems</u> (a) Identifies the types and grades of fuel (b) Demonstrates standard safety practices when handling liquid fuels	10.2.8 <u>Fuel Systems</u> (a) Identifies the differences between grades and types of fuel (b) Demonstrates correct selection of fuel grade and type for specific vehicles (c) Demonstrates standard safety practices	10.2.8 <u>Fuel Systems</u> (a) Demonstrates entry-level skills in pumping gas (b) Demonstrates entry-level skills in providing basic maintenance to a fuel system (c) Demonstrates entry-level safety practices

Level 16Level 26Level 3610.2.9 Business Practices10.2.9 Business Practices

- (a) Identifies the basic principles of good business practice
- (b) Defines:
 - salesmanship
 - service
 - marketing
- (c) Identifies need for time/task management

10.2.9 Business Practices

- (a) Identifies and describes the skills and knowledge required to operate a service station
- (b) Identifies and describes the competitive market in the oil and gas industry
- (c) Lists and describes marketing strategies:
 - advertising
 - promoting
 - displaying
- (d) Completes work orders
- (e) Completes credit card invoices
- (f) Completes sales receipts
- (g) Understands and verifies a packing slip
- (h) Identifies and records stock needs

10.2.9 Business Practices

- (a) Describes differences between sales and service
- (b) Lists the basic steps to start up a service station operation
- (c) Demonstrates sales and marketing strategies
- (d) Identifies and describes marketing strategies used by service stations in the community
- (e) Completes bank deposit forms
- (f) Completes a staff work schedule
- (g) Takes inventory of stock
- (h) Evaluates own performance

10.2.10 Related Services10.2.10 Related Services

- (a) Identifies other services commonly offered at service stations

10.2.10 Related Services

- (a) Identifies types of related services:
 - convenience store
 - coffee shop
 - car wash
 - other
- (b) Recognizes role of related service operations

10.2.10 Related Services

- (a) Demonstrates entry-level ability to work in a related service area:
 - convenience store
 - car wash
 - coffee shop

10.3 Work Standards10.3 Work Standards

- (a) Identifies safety regulations governing service station operations
- (b) Identifies labour regulations related to industry

10.3 Work Standards

- (a) Demonstrates ability to work to accepted standards
- (b) Demonstrates ability to record information:
 - hours worked
 - services performed
 - sales

10.3 Work Standards

- (a) Demonstrates pride in work
- (b) Demonstrates entry-level standards of performance:
 - safety
 - security
 - skill
 - sanitation

Level 16

- (c) Identifies sanitary regulations related to service station operations
- (d) Maintains work standards

Level 26

- (c) Maintains work standards

Level 36

- (c) Works to standards
- (d) Evaluates own performance

10.4 **Supplies Management**

- 10.4 **Supplies Management**
- (a) Identifies appropriate supply management strategies:
 - inventory control
 - storage
 - security

- 10.4 **Supplies Management**
- (a) Identifies and lists major suppliers of wholesale products to local service stations

- 10.4 **Supplies Management**
- (a) Demonstrates entry-level supply management skills
 - (b) Evaluates own performance

10.5 **Work Area Management**

- 10.5 **Work Area Management**
- (a) Identifies the procedures used to care for and maintain facilities, equipment and tools
 - (b) Recognizes the need for a safe, clean work environment
 - (c) Maintains a safe, clean work area

- 10.5 **Work Area Management**
- (a) Lists and prepares a schedule of care and maintenance duties commonly performed in a service station
 - (b) Maintains a clean, safe work area

- 10.5 **Work Area Management**
- (a) Demonstrates leadership and initiative
 - (b) Works with others to maintain work area to accepted standards
 - (c) Evaluates own performance

INTEGRATED OCCUPATIONAL PROGRAM

OCCUPATIONAL COMPONENT

SCOPE AND SEQUENCE

Occupational Cluster: Transportation

Occupational Course: **WAREHOUSE SERVICES**

Course Sequence: Warehouse Services 16–26–36

- Notes:**
1. The Warehouse Services sequence of courses includes instruction in the areas of warehouse operation, stock-keeping and parts merchandising.
 2. Level 16 focuses on identification of techniques and equipment used in storage, packaging, recording and basic warehouse tasks.
 3. Level 26 focuses on demonstration of previous tasks and procedures and identification of warehouse standards.
 4. Level 36 focuses on demonstration of previous skills and knowledge to entry-level standards.
 5. Students interested in automotive sales related jobs may be encouraged to include Automotives Services and Service Station Services in their program.
 6. Students interested in other warehouse, stock-keeping related jobs may be encouraged to include Business Services or Office Services in their program.

GENERAL OBJECTIVES

1. To develop students' personal and interpersonal skills.
2. To develop students' awareness of opportunities and employment conditions in the warehouse services industry.
3. To develop students' knowledge and skills in one or more areas of warehousing, stock-keeping and parts sales and service.
4. To enable students to obtain employment in a related occupation and/or to articulate with another secondary program or post-secondary institution for further education.

Level 16

Level 26

Level 36

10. WORK SKILLS

10.1 Identification

10.1.1 Job Scope	10.1.1 Job Scope	10.1.1 Job Scope	10.1.1 Job Scope
(a) Identifies the role of warehouse services in society, business and industry	(a) Lists and describes the role of warehouse services in society, business and industry	(a) Lists and contacts warehouse services operations in community	
(b) Identifies careers in warehouse services	(b) Identifies warehouse operations in the community	(b) Lists personal skills related to warehouse services industry	
(c) Lists job duties of warehouse employees	(c) Lists and describes basic job-entry requirements		
(d) Identifies basic requirements for job entry			
(e) Recognizes advantages and disadvantages of warehousing			

	Level 16	Level 26	Level 36
10.1.2 <u>Terminology</u>	10.1.2 <u>Terminology</u> (a) Identifies warehouse terminology (b) Identifies symbols and labels (c) Uses labels correctly	10.1.2 <u>Terminology</u> (a) Lists and defines/describes industry terminology (b) Uses symbols to identify products	10.1.2 <u>Terminology</u> (a) Uses industry terminology (b) Recognizes the major parts of the <i>Warehouseman's Lien Act</i>
10.1.3 Equipment, Tools and Supplies	10.1.3 Equipment, Tools and Supplies (a) Identifies common equipment, tools and supplies (b) Identifies measures used in warehousing (c) Identifies and describes function of storage containers: • rotabin • racks • modular shelving • line storage (d) Recognizes need for safety, sanitation and security	10.1.3 Equipment, Tools and Supplies (a) Lists and describes function of equipment and tools commonly used in area (b) Takes inventory of major equipment, tools and supplies (c) Demonstrates knowledge of safety, security and sanitation practices (d) Identifies stock management bar code system (e) Identifies content care labels	10.1.3 Equipment, Tools and Supplies (a) Identifies and records condition of equipment and tools (b) Demonstrates entry-level skills in safe, secure and sanitary practices
10.2 Equipment, Tools and Supplies Usage	10.2 Equipment, Tools and Supplies Usage	10.2 Equipment, Tools and Supplies Usage	10.2 Equipment, Tools and Supplies Usage
10.2.1 <u>Lifting, Carrying and Placing</u>	10.2.1 <u>Lifting, Carrying and Placing</u> (a) Identifies mechanics of lifting, carrying and placing of a load (b) Identifies stacking patterns: • blocks • row • brick • pinwheel (c) Identifies basic safety practices (d) Recognizes safe use practices for equipment, tools and supplies	10.2.1 <u>Lifting, Carrying and Placing</u> (a) Demonstrates correct mechanics of lifting, carrying and placing (b) Demonstrates four stacking patterns (c) Demonstrates the use of storage equipment (d) Describes three major bin set-up factors: • height/depth • weight • turnover rate	10.2.1 <u>Lifting, Carrying and Placing</u> (a) Demonstrates lifting, carrying, placing and stacking practices to entry-level standards (b) Demonstrates proper methods of safe removal of damaged goods (c) Demonstrates entry-level safety procedures (d) Evaluates own performance

Level 16

- (e) Demonstrates safe use of basic equipment
- (f) Identifies, defines and describes types of storable goods:
 - hazardous goods
 - packages
 - bulk goods
 - perishables
 - valuables
 - inflammables

Level 2610.2.2 Packing and Handling10.2.2 Packing and Handling

- (a) Identifies correct procedures for handling goods
- (b) Identifies procedures for:
 - packaging
 - closing/securing
 - wrapping
 - taping
 - labelling
 - weighing
- (c) Counts packages
- (d) Identifies external condition of packages
- (e) Identifies procedures for completion of reports:
 - overage report
 - shortage report
 - damage report
- (f) Identifies standard safety practices

- (a) Demonstrates selection of appropriate containers

- (b) Demonstrates efficient packing procedures

- (c) Selects correct labelling for shipments

Level 3610.2.2 Packing and Handling

- (a) Lists and describes the major types of packaging:
 - carton
 - box
 - container
- (b) Demonstrates basic entry-level packing, boxing, wrapping techniques
- (c) Follows appropriate safety practices
- (d) Evaluates own performance

10.2.3 Recording10.2.3 Recording

- (a) Identifies the flow of goods from customer request to customer acceptance of shipment
- (b) Identifies common warehouse forms

10.2.3 Recording

- (a) Completes:
 - customer shipping orders
 - addressing shipments
- (b) Explains the purpose of and completes:
 - packing slips
 - invoices
 - shipping records
 - stock requisitions
 - back orders
 - claim forms

10.2.3 Recording

- (a) Outlines purpose for and routing process of:
 - requisitions
 - purchase orders
 - packing slips
- (b) Demonstrates basic entry-level skills to complete forms:
 - packing slips
 - invoices
 - shipping records
 - stock requisitions
 - back orders
 - claim forms

Level 16Level 26Level 36

- (c) Prepares and completes related forms
- (d) Identifies path of completed stock requisition
- (e) Identifies main areas of a purchase order:
 - buyer
 - vendor
 - quantities
 - product descriptions

10.2.4 Shipping10.2.4 Shipping

- (a) Identifies the process and function of shipping
- (b) Identifies a shipping record document

10.2.4 Shipping

- (a) Identifies and completes a shipping record
- (b) Packs and ships an order

10.2.4 Shipping

- (a) Maintains shipping records in order sequence

10.2.5 Receiving10.2.5 Receiving

- (a) Identifies receiving procedures
- (b) Identifies procedures for reporting stock:
 - overages
 - shortages
 - damages
- (c) Identifies standard safety practices

10.2.5 Receiving

- (a) Completes a receiving document
- (b) Demonstrates procedures to:
 - unpack received goods
 - check received goods
 - evaluate quality of goods
 - reports goods discrepancies
- (c) Demonstrates standard safety practices

10.2.5 Receiving

- (a) Demonstrates basic entry-level skills in receiving products
- (b) Demonstrates standard safety practices
- (c) Evaluates ability to handle receipt of goods

10.2.6 Carriers10.2.6 Carriers

- (a) Identifies the function of carriers
- (b) Identifies six carrier types:
 - motor freight
 - parcel post
 - air freight
 - rail
 - couriers
 - waterway carriers

10.2.6 Carriers

- (a) Lists and describes the advantage of each type of carrier
- (b) Identifies Alberta and local carriers
- (c) Selects suitable carriers for shipments
- (d) Explains the purpose of interlining

10.2.6 Carriers

- (a) Identifies types of carriers used by warehouses in the community
- (b) Identifies types of products commonly carried by different types of carriers

Level 16Level 26Level 3610.2.7 Types of Warehouses

- 10.2.7 Types of Warehouses
- (a) Identifies types of warehouses

- 10.2.7 Types of Warehouses
- (a) Describes a "special commodity" warehouse

- 10.2.7 Types of Warehouses
- (a) Identifies local factors that can determine warehouse types and locations

10.2.8 Uses of Space

- 10.2.8 Uses of Space
- (a) Identifies "space use" as a major factor in warehouse efficiency
- (b) Identifies methods used to conserve floor space

- 10.2.8 Uses of Space
- (a) Explains the term "unit load"
- (b) Recognizes three major goals of material handling:
- minimum handling
 - fast handling
 - effective use of facilities
- (c) Describes "palletization"

- 10.2.8 Uses of Space
- (a) Selects appropriate storage unit for specific products
- (b) Identifies systems of stock location:
- random
 - single
 - product line
- (c) Evaluates the storage systems before, during and after use

10.2.9 Material Handling

- 10.2.9 Material Handling
- (a) Identifies the meaning of terms "material handling", "quality control"
- (b) Understands the meaning of related terms:
- FIFO
 - LIFO
- (c) Identifies the purpose of inventories
- (d) Identifies methods of taking inventory
- (e) Compiles an inventory of personal assets:
- clothes
 - sports goods
 - books

- 10.2.9 Material Handling
- (a) Identifies First-In First-Out (FIFO) method of stock control
- (b) Identifies product types requiring FIFO
- (c) Takes inventories

- 10.2.9 Material Handling
- (a) Describes the FIFO method of stock control
- (b) Identifies the requirements of a warehouse using FIFO
- (c) Takes and maintains inventories

10.2.10 Sales and Service

- 10.2.10 Sales and Service
- (a) Understands the meaning of the terms "sales", "service"

- 10.2.10 Sales and Service
- (a) Identifies and describes the types of warehouse sales and service operations
- (b) Identifies warehouse sales and service businesses in the community

- 10.2.10 Sales and Service
- (a) Identifies and describes the terms "customer loyalty", "repeat business", "service"
- (b) Identifies effective sales and service techniques

Level 16Level 26Level 36

- (c) Lists the major features of a stockroom/warehouse:
- automotive parts
 - machine parts
 - grain handling
 - fruits, vegetables

- (c) Demonstrates effective sales, services and customer relations techniques

- (d) Evaluates own sales and service performance

10.3 **Work Standards**

- 10.3 **Work Standards**
- (a) Identifies the need for standards
- (b) Identifies standards for handling materials and equipment in a warehouse or stockroom:
- safety
 - security
 - sanitation
- (c) Maintains work standards

- 10.3 **Work Standards**
- (a) Demonstrates ability to work to acceptable standards set by teacher/supervisor

- 10.3 **Work Standards**
- (a) Demonstrates pride in work
- (b) Demonstrates entry-level standards of performance

- (c) Evaluates own performance

10.4 **Supplies Management**

- 10.4 **Supplies Management**
- (a) Identifies the importance of maintaining a constant stock of supplies
- (b) Identifies common warehouse supplies

- 10.4 **Supplies Management**
- (a) Inventories warehouse supplies
- (b) Uses warehouse supplies efficiently and effectively

- 10.4 **Supplies Management**
- (a) Demonstrates entry-level supply management skills
- (b) Evaluates own performance

10.5 **Work Area Management**

- 10.5 **Work Area Management**
- (a) Cares for and maintains a warehouse or stockroom as directed

- 10.5 **Work Area Management**
- (a) Identifies and describes management and care duties that are needed in a warehouse or stockroom
- (b) Maintains a safe, clean work area

- 10.5 **Work Area Management**
- (a) Demonstrates leadership and initiative
- (b) Works with others to maintain work area to acceptable standards
- (c) Evaluates own performance

